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# Rehabilitation of Galena's 1858 historic post office and customhouse: relocation of the Galena-Jo Daviess Historical Society and Museum

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**Rehabilitation of Galena's 1858 historic Post Office and Customhouse: Relocation of the Galena-Jo Daviess Historical Society and Museum**

by

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Signatures have been redacted for privacy

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## INTRODUCTION

Galena, Illinois, has the distinction of possessing the nation's oldest continually operating post office, constructed in 1858 (Figure 1). The title was previously held by a post office in Castine, Maine, which ceased operations in 1998.[1] Knowing the value of this historic building, the City of Galena built a newer post office in 1996 that handles most of the

**Figure 1. Galena's Historic Post Office and Customhouse**

mail traffic for the city but maintained a branch post office in the historic building. Jo Daviess County, of which Galena is the seat, also has a historical museum in need of a new home. In 1991, the city developed a comprehensive plan suggesting the relocation of the Galena-Jo Daviess Historical Society and Museum into the historic Galena Post Office

[1] Personal interview with John O'Shea, Galena PostMaster, 2002.

building, thus utilizing the unoccupied space in the post office and meeting the functional needs of the museum (Figure 2).

This design thesis investigates the tasks required to rehabilitate the 144-year-old Galena Post Office to accommodate the historical museum.

**Figure 2. Galena – Jo Daviess Historical Society and Museum**

## HISTORICAL BACKGROUND

Customhouses and post offices played an important role in the developing nation during the early nineteenth century. During the 1830s alone, customhouses generated 95 percent of all federal revenue (Bluestone, 132). Beginning in 1833, the federal government, which had leased customhouses and post offices, sought to decrease federal spending by designing and constructing federal buildings to perform these functions. By 1858 when the Galena Post Office and Customhouse was completed, it was one of approximately seventy buildings constructed for this purpose (Bluestone, 146).

In 1969, the City of Galena designated the neighborhood within which the post office stands as a historic district, protected by an eleven-point historic preservation ordinance that is compatible with the U.S. National Park Service's *Standards of Rehabilitation* (Weeks and Grimmer, 20).

The Park Service created a *Checklist for Rehabilitating Historic Buildings* that outlined the methodology for historic buildings like the post office. The process involves documenting the history of the building, evaluating its historical character, assessing its existing architectural integrity in relation to its historical significance, and creating a feasible design. Rehabilitating the Galena Post Office and Customhouse must comply with the standards in the city's Historic Preservation Ordinance, which means that it will also comply with those of the U.S. National Park Service. The body of the thesis--the rehabilitation problem, methodology, and answer--spell out how these guidelines must and can be met during the rehabilitation process.

The thesis conclusion integrates the implied requirements of the city's Historic Preservation Ordinance with the program requirements for the Galena-Jo Daviess Historical

Society and Museum, as articulated by its curator, Daryl Watson in 1998.[2] The rehabilitation proposal explores some of the financial and community issues involved in relocating the museum.

Appendix A shows a reproduction of the original 1856 Galena Post Office and Customhouse drawings created by Ammi Burnham Young, acting architect for the U.S. Treasury Department. It is fortunate indeed that these drawings have survived, since they are necessary in establishing the building's original design. Throughout the document the original drawings are referenced for historic materials and features that have been relocated or removed from the existing post office.

Appendix B is a written historical summary documenting architectural, civil, electrical, mechanical, and structural changes to the historic building. A complete list of when alterations have occurred and significant events in the buildings history are important in assessing its historical significance.

Appendix C includes the 2002 Galena Post Office and Customhouse drawings showing the alterations mentioned in the historical summary. A comparison between the original and existing drawings helps determine what historic materials and features were relocated or removed.

Appendix D is a list of program definitions describing each of the proposed rooms in the new museum facility and their related functions. The definitions were developed from the existing museum and are important in understanding how each of the spaces will be occupied.

Appendix E includes space requirements for the existing museum, post office, and a rehabilitation proposal for the new facility. The new space requirements are incorporated into the rehabilitation proposal drawings in Appendix F.

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[2] Personal interview with Daryl Watson, Curator of Galena-Jo Daviess Historical Society and Museum, 1998.

Appendix F includes the rehabilitation proposal drawings for relocating the museum in the historic post office. The drawings show the room names referenced in the rehabilitation problem and answer portion of the text.

The National Park Service checklist provides the framework for this study, while the city Historic Preservation Ordinance outlines the procedure that must be followed to preserve historical features and materials significant to the Galena Post Office. Using the guidelines will clarify the feasibility of an addition and possible historic implications of remodeling the existing post office.

## REHABILITATION PROBLEM

Rehabilitation is the only preservation treatment that includes the use of alterations and additions to make a building efficient for contemporary needs (Weeks and Grimmer, 63).

The historic district consists of the Galena city limits as recorded in the Jo Daviess County Courthouse on March 28, 1838 and the subdivisions added to the city before December 31, 1858. These subdivisions and the core historic district are designated as the "Map of Galena Historic District" (Figure 3) in Galena's Historic Preservation Guidebook, published in November 1989 by the state Historic District Advisory Board (p. 2).

Galena's Historic District is regulated by a set of eleven guidelines that establish standards for protecting and maintaining historic building materials and character-defining features.[3] Under these standards, extensively deteriorated, damaged, or missing features may be replaced, using either traditional or substitute materials.

A certificate of compliance is issued if the proposal meets the following eleven standards:

*1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*

*2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*

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[3]The ordinance also requires that all new structures in the historic district larger than 100 square feet must be reviewed by a board composed of five representatives from the community.

Figure 3. Map of Galena Historic District

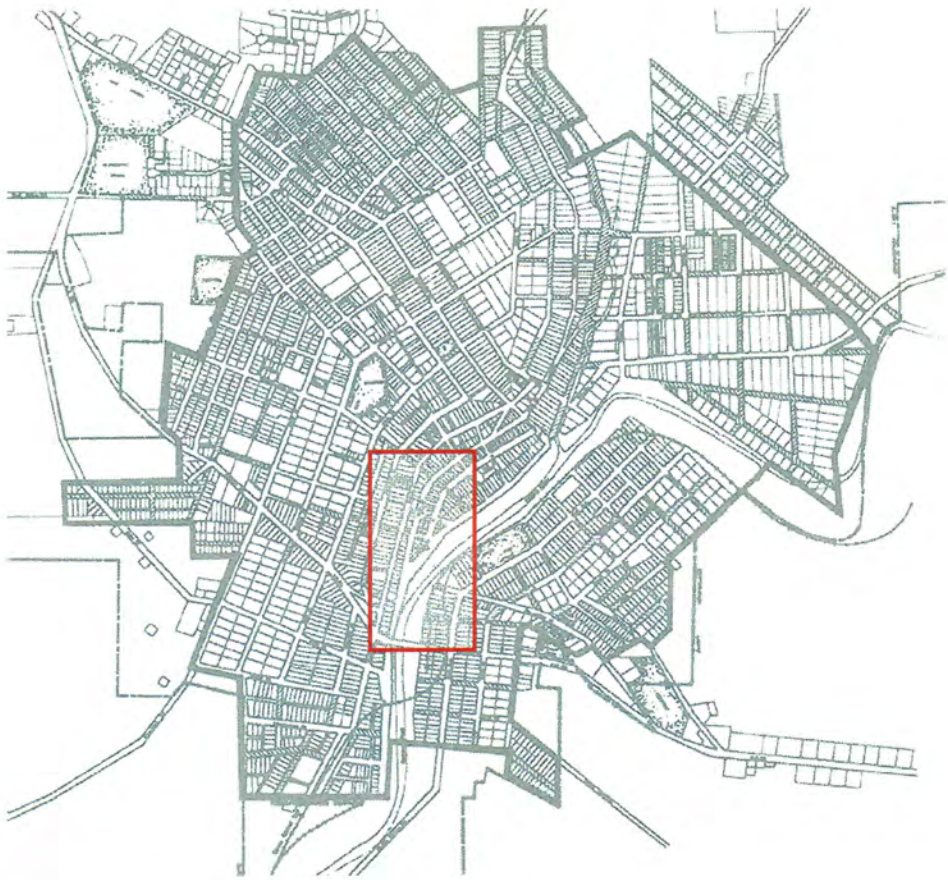
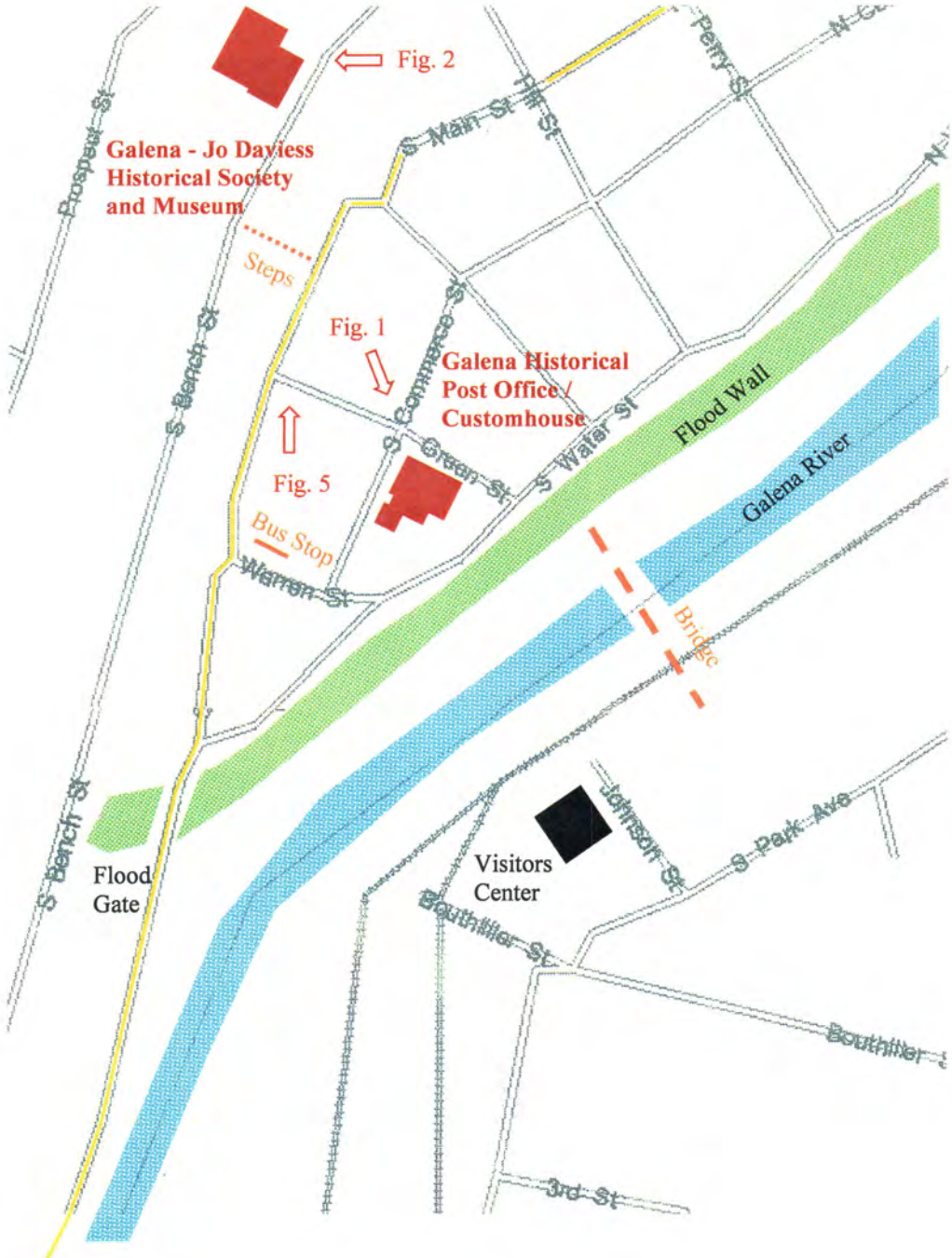


Figure 4. Partial Plan of Downtown Galena Historic District



*3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.*

*4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.*

*5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*

*6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.*

*7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.*

*8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

*9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.*

*10. New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

*11. The quality of materials and craftsmanship used in the rehabilitation project must be commensurate with the quality of materials and craftsmanship of the historic building in question. Certain treatments, if improperly applied, or certain materials by their physical properties, may cause or accelerate physical deterioration of historic buildings. Inappropriate physical treatments include, but are not limited to: improper tuckpointing techniques; improper exterior masonry cleaning methods; or improper introduction of insulation if damage to historic fabric would result. In almost all situations, use of these materials and treatments will result in denial of certification. Similarly, exterior additions that duplicate the form and material and detailing of the structure to the extent that they compromise the historic character of the structure will result in denial of certification. For further information on appropriate and inappropriate rehabilitation treatments, owners are to consult the Guidelines for Rehabilitating Historic Buildings published by the National Park Service or contact the City Building Department. "Preservation Briefs" and additional technical information to help property owners formulate plans for the rehabilitation, preservation and continued use of historic properties consistent with the intent of the Secretary's Standards for Rehabilitation are available from the State Historic Preservation Officer, the National Park Service regional offices and the City Building Departments. Owners are responsible for procuring this material as part of*

*properly planning for a certified rehabilitation (Illinois, Historic Preservation Ordinance, 14-15).*

The National Park Service's standards are "neither technical nor prescriptive, but are intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources" (Weeks and Grimmer, *Guidelines,* 1). The same can also be said of the guidelines adopted by both the State of Illinois and the City of Galena for its own historic preservation projects.

The geographically limited site of the post office requires demolishing some historic structures to rehabilitate the building to accommodate the county historical society and museum. This thesis evaluates the priority of preserving certain historic features and materials. My goal is to create a design for the new addition that will meet both the Galena city standards for its historic district and also the requirements of the museum.

## REHABILITATION METHODOLOGY

The following definitions describe eight steps required to plan an appropriate historic rehabilitation. These steps are: identifying, protecting, repairing, replacing, designing historic materials and features, making new alterations/additions, meeting code requirements, and identifying financial incentives.

### Identify, Retain, and Preserve Historic Materials and Features

The first step in determining historic character is to analyze the building's overall visual appearance (Nelson, 2-3). Primary features include the building's relationship with other buildings, interior and exterior features, and functional and aesthetic features. The relationship with other buildings includes comparing the building's height, type of material, and type of structure. Windows, doors, and decorative trim define the relationship between the interior and exterior of the building. The visible roof features, such as overhanging eaves and chimneys, constitute both functional and aesthetic characteristics. Examples of secondary features are window shutters and exterior metal work. Less tangible characteristics include the building's relationship with the street, local amenities, parking, and the pedestrian right of way (Nelson, 3-5).

The second step requires analyzing the building's visual character at a close range. It is important to determine the materials' origin, craftsmanship, quality, wear from weather and use, overall composition, and the process by which they were installed (Nelson, 5-6).

The third step involves analyzing the visual appearance of interior spaces, features, and finishes. Determining the size, height, proportion, and function of the individual spaces is important, while the sequence of spaces is defined by the transition between their functions--for example, the relationship between public and private rooms within a building. Interior features include fireplaces, interior shutters, light fixtures, doors, windows, hardware, radiators, vents, fans, grills, plumbing fixtures, switch plates, and casework. Finishes impact

the space through color, texture, method of application, and composition of materials used in the floors, ceilings, and walls (Nelson, 6-8).

### Protect and Maintain Historic Materials and Features

As the National Park Service guidelines specify, existing historic materials and features in a rehabilitation project like the Galena Post Office must be protected and maintained with the "gentlest" cleaning methods possible to prevent further damage or deterioration (Weeks and Grimmer, 62-63). In 1987, Anne McGuire, a historical consultant, identified several improvements required to preserve the existing condition of the building and spelled out several concerns about future improvements to the property. These recommendations are discussed in more detail under "Rehabilitation Answer."

### Repair Historic Materials and Features

This step includes patching, piecing-in, splicing, and consolidating to improve the historical quality of the building's fabric. Repairing includes replacing minor pieces of historical fabric with the same material and finish (Weeks and Grimmer, 63-64).

### Replace Deteriorated Historic Materials and Features

Replacing entire pieces of the historical fabric is allowed only if the damage to or deterioration of the original is beyond repair. The same material should be used in the new piece that will replace the damaged or deteriorated piece. However, if using the same material would be too expensive and if the piece does not have a significant impact on the structure's overall historical appearance, then a substitute material may be allowed (Weeks and Grimmer, 64).

### Design for the Replacement of Missing Historic Features

When a historical feature is missing, it must be replaced. The first step in designing a missing historical feature is to examine the information determined during the documentation

and assessment process. If it contains adequate information, then the piece should be reconstructed in the same material and design as the original. An alternate approach maybe considered if the original method is cost prohibitive or if adequate information is not available. If the above information is unavailable the new piece can be similar in design and material to the original (Weeks and Grimmer, 65).

### Alterations/Additions for New Use

In rehabilitation, some alterations and additions are usually required so that the building can continue to be used. Such changes may take place as long as they do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Additions should be considered only after a thorough investigation determines that alterations will not be feasible (Weeks and Grimmer, 65).

### Accessibility Considerations/Health and Safety Code Considerations

An important aspect of making a design proposal is being sure that the rehabilitated building meets local and state codes. A technologically improved building saves energy, allows more people to utilize the facility, and ensures their safety. Major code requirements include energy efficiency, accessibility, and health and safety considerations (Weeks and Grimmer, 66). However, the National Park Service's guidelines balance historic preservation against code considerations and determine that these changes should not take place if they destroy character-defining spaces, materials, features or finishes.

### Check Use of Funds/Review Requirements

Because tax incentives on historical projects can be significant, any proposal for rehabilitating such a building should assess possible sources of funds and/or tax incentives (U.S. Dept. of the Interior, *Checklist,* 4-5).

## REHABILITATION ANSWER

### Identify, Retain and Preserve Historic Materials and Features

The 1858 Galena Post Office/Customhouse is located within the heart of Galena's Historic District (Figure 4). The cities major construction boom between 1830 and 1850 defines the historic district. The majority of the buildings along Main Street are two stories high, the first floor is commercial space with apartments on the remaining floors (Figure 5). The buildings are constructed of structural clay bricks and wood-framing members. The buildings along Main Street remain vital to Galena's economic development with small antique, clothing, and food establishments supporting its tourism industry.

The post office and customhouse is located on Commerce and Green Street, one block from Main Street (Figure 1). Constructed of limestone, brick, concrete, and steel framing members, it is two stories tall. Metal columns support the interior with decorated capitals near the ceiling. The exterior load bearing walls are constructed of limestone and brick. The limestone on the exterior came from a quarry in Nauvoo, Illinois, renowned as one of the best in the Midwest for its impeccable quality (Figure 6).

The post office currently resides on a triangular lot caused by the relocation of Water Street in 1951, during the Galena River floodwall construction (See Appendix C, "2002 Galena Post Office/Customhouse Drawings, Site Plan"). The original 1858 structure is

**Figure 5. Main Street Galena, Illinois**

**Figure 6. Limestone Sample**

joined on the lot by three additions. The woodshed, constructed in 1883, functioned as a storage building for the wood supplying the eight fireplaces on the neighboring lot. The two lots were combined approximately 1920 connecting the wood shed to the post office with a boiler addition. Approximately 1970, a loading dock was constructed on the south entry of the post office, next to the boiler addition.

The original post office had evenly spaced openings around its side: five second floor windows on the north and south sides, and three on the east and west sides (See Appendix A, "1856 Post Office/Customhouse Drawings – Drawing 3, 5 & 7"). On the first floor, the location of the windows is repeated with a door taking the place of the window on the north, south, and east sides, and two doors on the west sides. Windows similar to the second floor occupy the other locations (Figure 1). The entrances on the east and south sides were altered from their original design. The entrance on the east side was replaced by a window (Figure 7). The first floor window on the right side of the photograph shows the original capital and trim around the renovated window. The window trim is constructed of concrete to match the existing limestone. The entrance on the south side was removed during the construction of the loading dock (Figure 8). The capital above the south entry still remains. The photograph shows the five capitals at the roof level of the addition. The original post office doors were cast-iron replaced with wood doors around 1900 (See Appendix A, "Drawing 5"). The

**Figure 7. East Elevation**

**Figure 8. South Elevation**

original design drawings show the second floor window on the south side to be infilled with limestone (See Appendix A, "Drawing 2, Plan of the Second Story").

On the original design drawings cast-iron shutters are shown on the exterior windows (See Appendix A, "Drawing 7"). The photographs referenced in the historical summary do not show the shutters. The limestone window casings do not have any anchor bolt locations where the shutters would have been installed. The evidence seems to show the cast-iron shutters were designed but never installed.

When electricity was supplied to the building in 1911, exterior wall mounted light fixtures were installed on either side of the two remaining lobby entrances (Figure 9).

In 1907, the original limestone balustrade wrapping the perimeter of the post office roof was removed (See Appendix A, "Drawing 3 & 5"). The original corrugated metal roof was significantly altered from Young's design when an additional asphalt-shingled structure was built on top of existing metal truss roof to increase the slope (See Appendix A, "Drawing 4"). In Figure 1, the asphalt-shingled structure remains with eight silhouette chimneys. Gutters and downspouts were added at the roof edge to drain the rainwater into the sewer system.

**Figure 9. Exterior Light Fixture**

The first floor of the post office is composed of the lobby/vestibule, an interior vestibule, mailroom, postmaster's office, restrooms, stamp vaults, and stairwell (See Appendix C, "First Floor Plan"). The post office first floor stands above the street level, with steps leading down to the streets, originally unpaved (See Appendix A, "Drawing 3").

In the original design by Young, a screen wall extended the entire length of the building between the lobby/vestibule and

mailroom (See Appendix A, "Drawing 2"). The screen wall was composed of post office boxes, a main service window, two doors accessing the mailroom from the lobby/vestibule, and arched windows located in the upper half of the wall between the interior columns (See Appendix A, "Drawing 8"). Approximately 1907, the east entrance was renovated into a window and a portion of the interior screen wall was relocated, making the mailroom slightly larger (See Appendix C, "First Floor Plan"). The main service window was removed when the interior vestibule was constructed at the north entry (Figure 10). The interior vestibule is approximately five feet by seven feet with limestone flooring. Two doors provide access into the lobby/vestibule on the east and west sides of the interior vestibule (See Appendix C, "First Floor Plan"). Currently, there are two service windows located on the west side of the screen wall (Figure 11). Interior doors lead from the lobby/vestibule into the mailroom and postmasters office (See Appendix C, "First Floor Plan"). Two chandeliers provide light for the lobby/vestibule, installed approximately 1911. The woodwork is painted with a wood grain finish and the metal arches are a greenish black color.

The mailroom is constantly changing based on postal functions (Figure 12). Ceiling mounted fluorescent light fixtures illuminate the work service for the postal employees. Ceiling mounted fans are installed for addition cooling purposes during the summer months.

**Figure 10. Interior Lobby Looking East**

**Figure 11. Interior Lobby Looking West**

The floor of the mailroom is concrete.

The postmaster's office originally was located on the southwest corner of the building (See Appendix A, "Drawing 2 & 3"). The north wall had arched windows similar to the screen wall dividing the mailroom from the lobby/vestibule. The postmasters office was removed for the construction of two restrooms approximately 1907 (See Appendix C, "First Floor Plan"). The indoor restrooms replaced the outhouse located next to the woodshed (See Appendix C, "Site Plan").

Two stamp vaults added in 1911 and 1924 replaced the original corridor (See Appendix A, "Drawing 2") on the first floor next to the original staircase (See Appendix C, "First Floor Plan"). A partial height wall supported the stair with exposed cast-iron trim running the length of the stair (See Appendix A, "Drawing 6"). The stamp vaults concealed the ornamental stair leading to the second floor (Figure 13).

Between 1964 and 1980 a new postmaster's office was constructed on the west side of the mailroom. The door leading into the new postmaster's office from the lobby/vestibule is original to the building's construction (Figure 14). A small vestibule between the door and the stair is floored with limestone tiles, and the original chandelier, installed 1911, hangs

**Figure 12. Mailroom**

**Figure 13. Stamp Vault Next to cast-iron stairs**

**Figure 14. Original Lobby/Vestibule Doorway**

from the center of the vestibule ceiling (Figure 15).

The southwest entry at the base of the stair provides access to the second floor. The stair climbs fifteen feet to the second floor. The floor is constructed of arched brick spanning between metal beams (See Appendix A, "Drawing 4"). A hall at the top of the stair, connects the main custom room, weigher & guager room, and the collector room (See Appendix A, "Drawing 2"). Approximately 1907, a restroom was added in the weigher & guager room with a doorway into the hall (Figure 16 and See Appendix C, "Second Floor Plan").

The original interior doors on the second floor are approximately ten feet tall and four feet wide (Figure 17). On the right hand side of the photograph is a ships ladder leading into the attic through a ceiling access panel.

An interior wall was added prior to 1911 dividing the main custom room into a smaller main room and an additional office (See Appendix C, "Second Floor Plan"). Another wall was added in 1911 that had an arched opening dividing the main custom room once again (Figure 18).

The ceiling of the second floor is seventeen feet above finish floor. An example of

**Figure 15. Original Stairwell Light Fixture**

**Figure 16. Second Floor Restroom**

**Figure 17. Second Floor Hall**

**Figure 18. Second Floor Arched Opening**

**Figure 19. Loading Dock looking West**

**Figure 20. Loading Dock looking East**

the wood profiles can be seen in the original drawings adorning the connection between the ceiling and the wall (See Appendix A, "Drawing 6").

Approximately 1970, a loading dock was added to the south side of the post office. The addition did not impact the original windows designed by Young (Figure 19).

New loading dock doors were added for large mail deliveries. The new doors replaced the limestone trim with concrete block construction (Figure 20). Ceiling mounted fluorescent light fixtures illuminate the loading dock.

Originally, eight marble fireplaces heated the post office with wood stored in the brick woodshed on the neighboring property (Figure 21). In the late 1800s, a new boiler was installed with radiators located on the first and second floor of the post office.

In 1980, A. M. Kinney Associates, Inc. from Chicago, over saw a paint analysis

**Figure 21. Second Floor Fireplace**

of the post office. The original paint colors of the post office were researched and paint samples were taken from each room to verify the original paint color. The existing surfaces were then repainted to match the building's original colors.

## Protect and Maintain Historic Materials and Features

After identifying the historic materials and features to be preserved in the rehabilitation process, the next level is to protect the historic materials and features from further deterioration and administer gentle cleaning methods.

Preventing water damage is critical step in ensuring the longevity of a building. Beginning at the top of the building, the roofing system is the first line of defense against water damage. The roof has an asphalt-shingle system with flashing, gutters, and downspouts replaced approximately five years ago. The system is intact and could last another 10 years. Seven of the eight existing limestone chimneys have sustained water damage that has chipped away limestone and mortar joints. During the roof repairs the chimneys received new mortar preventing further water infiltration. The southwest chimney was replaced with brick and concrete similar in profile to the original chimneys (Figure 22).

The limestone facade will be cleaned only to stop deterioration or to remove the heavy soiling marks using the gentlest means possible. The next section will discuss mortar repair and replacement.

A structural engineer should analyze the historic building for possible settlement and structural damage. If structural deficiencies are found, X-ray photography can be used to detect the failing structure and facilitate the appropriate repair. If reinforcement is required, it shall be installed without altering the building's historic character (Weeks and Grimmer, 91-93). A structural engineer shall analyze the post office for potential seismic upgrades.

**Figure 22. Southwest Chimney**

Anne McGuire, a Chicago historic preservation consultant, noted five cracks in five of the eleven basement window lintels (McGuire, 7).

The basement lintels are currently monitored for movement by the postal service (See Appendix C, "Basement Plan"). A structural engineer shall also analyze the lintels to ensure the proper methods are undertaken to prevent further damage.

The historic stair located in the post office is constructed out of cast-iron, a generally soft material (Figure 13, 16 & 17). The cast-iron treads, risers, and rails have numerous layers of paint and the treads show slight wear marks. A trained professional shall administer the paint removal from the cast-iron pieces because of the air contaminants associated with cast-iron. Sample areas will be selected to apply three cleaning methods: wire brush, chemical stripper, and dry sandblasting. If one of the methods gently cleans without damaging the cast-iron, the entire stairs will be cleaned. The cleaned surface will be painted to match the 1980-paint analysis. The wood handrail will be removed and refinished to match the original finish.

An electrical engineer will check the wiring for potential fire hazards and analyze the electrical panel for adequate power for existing and proposed requirements.

## Repair Historic Materials and Features

The foundation walls of the post office are constructed of limestone and concrete. The porous foundation walls allowed water to leak into the basement and a sump pump pumped the water out of the basement. Chemical sealers have since been applied to the foundation walls to create an impervious surface (See Appendix C, "Foundation Plan").

In 1998, the windowsills on second floor showed signs of water damage and the paint was chipping. The postal facilities have since caulked and sealed the windows against water damage. The chipped paint was removed and the cavities were filled with wood putty and sanded smooth (Figure 23). The interior window components were then painted to match the 1980-paint analysis. The photograph shows the dual glass system preventing additional moisture from damaging the sill and window trim. The exterior window profile matches the original window (See Appendix A, "Drawing 7").

**Figure 23. Repaired Windowsill**

The ceiling hung light fixtures on the first and second floor of the post office should be removed along with miscellaneous duplex outlets in the original walls. The old lighting conduit will be removed back to the electrical panel. The plaster and associated surfaces will be repaired to match their adjacent finishes. The new conduit shall be routed through the basement and in the attic to conceal the majority of the conduit. The second floor can be illuminated from ceiling with junction boxes located in the ceiling cavity. The first floor light will be illuminated from wall mounted fixtures with the conduit extending from the basement.

## Replace Deteriorated Historic Materials and Features

Approximately five years ago the façade of the post office and additions underwent selective limestone, brick, and mortar replacement and repair. The limestone façade has sustained soiling and signs of weathering. The freeze thaw cycle has cracked and deteriorated pieces of the limestone facade. Colored concrete matching the limestone was applied to the deteriorated pieces to create a new appearance (Figure 24). The loose mortar joints were replaced with new mortar matching the original color, texture, and application.

The façade of the additions are constructed of brick. The brick has undergone similar weathering as the limestone but also shows signs of exterior structural cracks in the façade. During the limestone restoration the brick façade was also repaired. Cracks in the brick were sealed with new mortar and the new joints were raked flush (Figure 25). The brick on the building received a fresh coat of paint, adding an additional level of waterproofing.

**Figure 24. Limestone Replacement**

**Figure 25. Mortar Joints Replacement**

## Design for the Replacement of Missing Historic Features

The lobby/vestibule is the most important public space within the 1858 Galena Historic Post Office/Customhouse (See Appendix A, "Drawing 2, Entrance Story Plan"). The lobby/vestibule originally had three entrances. One of the entrances was removed to enlarge the mailroom (Figure 26). The two remaining entrances are not handicap accessible because of the steps from the sidewalk to the first floor level. The renovated entrance is located on an inconspicuous side of the building allowing for a handicap entrance without modifying the two existing historical entrances. The design for replacement of the original entry will provide handicap access to the service windows and post office boxes and compliment the historical character of the building.

**Figure 26. Renovated East Entrance**

A concrete windowsill and window replaced the original northeast entrance (Figure 27). Removing the concrete windowsill and replacing the window with a pair of doors similar to the existing northwest entrance will allow for a new handicap accessible entrance. Historical evidence in the original drawings substantiate the design for replacement of the historic entrance similar to the northwest entrance (See Appendix A, "Drawing 2 & 5). Restoring the east entrance will also require the relocation of the existing screen wall to its original position (See Appendix F, "First Floor Plan"). The dashed lines in the rehabilitation drawing indicate the portion of screen wall to be relocated. An additional

**Figure 27. East Entrance Window Replacement**

entrance must be designed for the screen wall. The original drawings show two screen wall entrances located on both sides of the screen wall (See Appendix A, "Drawing 2 & 8). The drawings indicate both entrances are the same, therefore the new entrance can be modeled after the existing screen wall entrance (Figure 14). New limestone flooring will have to be installed in the accessible entrance area indicated on the drawings to match the existing flooring (See Appendix F, "First Floor Plan W/Proposed Modification and Addition").

The rehabilitation of the post office will require the construction of handicap accessible restrooms. There are two restrooms on the first floor and one on the second floor of the post office that do not meet handicap accessibility regulations. New handicap restrooms will be constructed in the addition to replace the existing restrooms.

The removal of the existing restrooms will decrease exposed piping, eliminate additional surface mounted electrical conduit, and allow for the reconstruction of the original postmasters office on first floor. The original postmasters office was located on the southwest corner of first floor (See Appendix A, "Drawing 2"). The north wall of the room had windows separating the postmasters room from the mailroom (See Appendix A, "Drawing 2"). An elevation of the north wall can be seen on drawing number three of the original drawings (See Appendix A, "Drawing 3").

The corridor along the stairwell was displaced by the installation of two stamp vaults (See Appendix F, "First Floor Plan"). The drawings show the location of the original corridor (See Appendix A, "Drawing 2"). The removal of the two stamp vaults and janitor's closet will allow for circulation around the stairs and restore the historical character of the cast-iron stair. The concrete floors and plaster walls and ceiling will have to be repaired to match the original corridor configuration. The doors or photographs of the stamp vaults can be relocated to the museum because the vaults are no longer used by the post office and the mailroom is not open to the public. The corridor will be repainted to match the 1980-paint analysis.

The roof of the post office originally had a limestone balustrade and a low-pitched roofing system (See Appendix A, "Drawing 3"). The balustrade was removed and a high-pitched roofing system, with asphalt-shingles, was installed. The secondary roofing system will be removed and the original limestone perimeter balustrade will be replaced. A new roofing membrane will be installed on the original roof structure to create a watertight roofing system.

## Alterations/Additions for the New Use

The satellite post office occupies only the first floor with approximately 2,260 square feet of the total 7,920 square feet in the building. Successfully incorporating the Galena – Jo Daviess Historical Society and Museum into the postal facility will require constructing 6,740 square feet of additional space.

The most significant view of the post office is from Green and Commerce Streets from the northwest corner (Figure 1). Positioning the museum addition on the south side of the building will minimize its distraction from the original structure. Because the lot is small, this museum addition will require the demolition of the three existing additions -- the woodshed, old boiler room and loading dock.

The museum program includes a movie room, museum display space, kitchen and layout area, storage, museum offices, a gift shop, lobby, handicap restrooms, and elevator (See Appendix E, "Program Definitions"). The relocation of the museum involves the overlapping of the space requirements of the existing museum with that of the post office (See Appendix E, "Space Requirements").

The museum program requires numerous functions located on the first floor (See Appendix F, "2002 Proposed Modifications and Addition, First Floor Plan"). As the patron enters the building, handicap or not, the person should be greeted and offered assistance purchasing tickets and the opportunity to view a movie about the history of Galena. The receptionist will be required to oversee the operation of the movie room and provide security for the entrance into the museum.

A loading dock and a temporary storage area are required on first floor for receiving artifacts for future museum displays. An additional night entrance will be required for access to the second floor of the post office when the space becomes double as a public meeting

room (See Appendix F, "First Floor Plan"). The city currently does not have a permanent location for city council meetings.

The museum curator and assistant can use the original post masters office to provide immediate assistance to the receptionist and bring an office function into the historic space (See Appendix F, "First Floor Plan"). The glass located in the reconstructed north wall would require an opaque or reflective glass to separate the functions of the mailroom for security reasons.

The second floor of the post office and museum addition will be used for the display of museum artifacts (See Appendix F, "Second Floor Plan"). The second floor must be accessible from the first floor by stairs and an elevator. The second floor of the post office once held General Ulysses S. Grant's homecoming, with paintings hung on the wall depicting scenes of the Civil War. The museum could use the existing space to display Civil War related artifacts in memory of Grant's homecoming (See Appendix B, "Historical Summary"). The second floor of the post office must be connected to the museum addition to allow patrons to access the second floor of the old post office by an elevator.

The basement of the addition and the post office can be utilized as storage space and provide ample room for work surfaces to develop museum displays (See Appendix F, Foundation Plan"). An elevator must connect the loading dock to the basement for the storage and the second floor for display.

The program of the museum organizes the interior rooms within the post office and determines the size of the required footprint. Galena's historical codes are primarily focused on preserving the exterior historical character of the post office. The code requires that the exterior addition, "should be designed and constructed to be clearly differentiated from the historic building and so that the character-defining features are not radically changed, obscured, damaged or destroyed." (Illinois, *Historic Preservation Ordinance*, 15).

The addition's first floor plan has four setbacks from the street. Two setbacks are located between the museum addition and the post office (See Appendix F, "First Floor Plan"). The reveal will create a visual separation between the post office and addition. The other two setbacks are located at the entrance into the museum addition (See Appendix F, "First Floor Plan"). The setback acts as a separation from sounds created by street traffic (DeChiara and Crosbie, 304).

Limestone and brick are used in the construction of the addition's façade (See Appendix F, "West & East Elevation"). The brick is located within the reveals and on the south side of the addition for potential cost savings and highlighting the difference between the addition and the original structure. The rest of the facade is constructed out of limestone cut in a similar dimension as the original limestone façade and includes a modified wainscot and capital. The combination of limestone components offers a similar visual appearance to the original structure without replicating forms of the past.

The height of the addition is four feet lower than the post office, enhancing the visual importance of the original structure. A portion of the roof is raised to allow additional second floor ceiling height, additional natural light through the clerestory windows, and offers a visual screen for the mechanical units. The raised portion is setback from the façade to create a diminutive design appearance from the pedestrian's right-of-way. The clerestory windows have louvers controlling the amount of light allowed into the second floor exhibit area. The proposal drawings also illustrate the connection between the original structure and the roof configuration (See Appendix F, "West Elevation and Roof Plan").

## Accessibility Considerations/Health and Safety Code Considerations

Galena has adopted the 1997 Uniform Building Code and 1998 ANSI A117.1, American National Standard for Accessible and Usable Buildings and Facilities. When implementing the building codes within a rehabilitation project the goal is to provide the highest level of access with the lowest level of alteration to the historical nature of the post office (Jester & Park, 1).

The building code classifies the existing post office as a Type V-I rating. This rating requires either the installation of one-hour rated floor and ceiling assemblies or the installation of sprinklers. Because of the historic nature of the building, sprinklers will have less of an impact on the post office's historic character. Coverage for the first floor can be hung from the ceiling of the mailroom with typical deluge heads. Horizontal dispersing heads can be mounted through the wall from the mailroom, providing additional coverage to the lobby/vestibule, postmaster's office, stairwell corridor, and original postmasters office. The sprinkler pipes on the second floor can be installed in the attic and have surface mount heads installed through the second floor ceiling.

A wall was added to the customs room on second floor and in the proposal the wall is removed. The removal of the wall requires additional means of egress from the space. The two windows in the proposal are removed for access to the museum addition from the post office. The second floor plan shows the removal of the existing wall and the two new openings connection the addition and the post office (See Appendix F, "Second Floor Plan").

There are three parking spaces located on the east side of the building. The spaces can be modified for handicap parking and marked with signage that complies with the American Disabilities Act (ADA) (Jester & Park, 4). The easiest way for the handicapped patrons to enter the post office lobby will be through the remodeled east entry (Jester & Park,

6). The accessible path will be four feet wide with a slope of less than 1:20 and minimal cross slope (See Appendix F, "First Floor Plan") (Jester & Park, 4).

According to the ANSI Standards, the difference between the interior finish floor level and exterior landing cannot be greater than ¼". The transition strip will be no higher than ½" with ¼" beveled edges (Jester & Park, 6). The east entry door can open automatically with a push button to serve those on crutches or in wheelchairs, who would have difficulty pulling the door open.

Accessible restrooms are located in the new addition with ANSI and ADA compliant fixtures and accessories. A corridor connects the two buildings together allowing postal employees to access the new facilities (See Appendix F, "First Floor Plan").

The most feasible way to reach the second floor without compromising significant historical materials and features in the post office will be to include an elevator in the museum addition. The elevator could be removed with the addition at a later date without altering the historic character of the post office.

## Mechanical Systems

A historic rehabilitation project must meet the building code requirements of the city and the county. However, achieving this goal requires careful consideration; if code-required actions are hastily made or simply applied, as they would be in a modern structure, they may jeopardize a building's historic character (Weeks and Grimmer, *Guidelines*, 1). In the case of the 144-year-old post office, bringing the building up to code in its mechanical systems requires special consideration.

Selecting the proper size of cooling and heating equipment requires considering external exposures, occupancy requirements, temperature and humidity levels, zoning for occupancy use, and length of operating time (Park, 9). The preservation of the artifacts dictates an extremely controlled environment. Insulation levels within the walls, roof, and

floors may not be high enough in the original structure to meet current energy code requirements.

Inconspicuous insulation could be installed in the attic and in the basement of the post office. Due to the historic nature of the post office, the walls will not be furred out for additional insulation. If required, new aluminum window frames could be installed to match the profile of the original frames. One-inch low-e glazing units could improve the building's efficiency without impacting the building's historical character (See Appendix A, "Drawing 3, 5 & 7"). All exterior windows on the second floor of the post office will be have ultraviolet protection membrane applied to the surface to protect artifacts.

A boiler located in the boiler addition, supplies steam to radiators located in the post office. With the existing mechanical system the temperature on the first and second floor is difficult to control during the winter months (McGuire, 8). During the summer, the post office is cooled by window-hung air conditioners.

The relocation of the museum will require large heating and cooling equipment to control the air quality. Locating the equipment on the roof of the old structure will increase the loads on the building requiring additional supports detracting from the historic spaces. If the new equipment is located on the roof of the addition, the equipment can be concealed from view, structural members can be properly sized, and the ductwork required to provide necessary air changes can be concealed. An air handling unit will supply required air changes and a new efficient boiler will supply heat through the existing radiators and heat the air from the air handling unit. Retrofitting the existing radiators increases efficiency and preserves the historical character of the space.

The new ductwork can be routed through the chase next to the stairwell and restrooms within the addition (See Appendix F, "First and Second Floor"). The first floor can be routed through the basement of the post office to serve first floor and through the attic to serve second floor. Additional space maybe available through the first floor ceiling above the

receiving area and the corridor connecting the addition and the post office. The ductwork could serve the mailroom, lobby/vestibule, and postmasters office.

The restrooms within the addition will fulfill the number of required water closets, sinks, urinals, exhaust fans, floor drains, finish requirements, and 5'-0" handicap radius for patrons and employees (See Appendix F, "First and Second Floor"). The postal employees will have access to the restrooms through the first floor corridor connecting the post office and the addition.

## Structural System

There are a couple of important things to keep in mind when deciding on a structural system for the addition. The addition needs to be designed without detrimentally impacting the original structure. The foundation of the addition will be dug at a minimum of 10'-0" from the existing foundation to preserve the structural integrity of the old structure. Digging to close may cause a collapse. Columns must also be located 10'-0" feet from the post office and beams connecting the two structures must be cantilevered from the addition. At the floor, wall and roof there must be expansion joints to cover the connection. The expansion joint allows a gap between the two structures for movement and offers an opportunity to remove the addition without impacting the historic character of the post office. The elimination of new columns and beams inside or augmenting the historic structure will preserve the historic character of the post office. The final assessment of the structural design ultimately rests with the structural engineer.

## Electrical system

The upgrade of the electrical system should be undertaken by electrical engineer to ensure safety of the wiring and having sufficient power for new program requirements. The new wiring can be located along the mechanical ducts and should be concealed from the public right-of-way.

The most significant electrical impact on the historical character is lighting. The museum should be designed to make the best use of natural light and to minimize the expense of artificial light. Natural light improves the color quality and clarity of the exhibits. However, windows at eye level decrease the amount of exhibit space. Clerestory windows are an option to introduce light without compromising wall space. The design proposal introduces clerestory windows to illuminate the display area. The light is carefully controlled to preserve the artifacts from direct sunlight without losing the sun's color spectrum.

Depending on the proposed use within the post office, lighting issues involve light fixture density, light quality, light zoning, impact of natural light, and the overall control of the interior light levels different types of lighting maybe recommended by the electrical engineer. To preserve the historical character of the post office the first floor should be illuminated with floor or wall lamps and the second floor should be down-lite from the ceiling. Both of these methods will dramatically reduce exposed conduit within the historic space.

## Building Site

The current parking lot is located on the east side of the post office (See Appendix F, "Site Plan W/Proposed Modifications and Addition"). This area could also serve as land available for future building expansion. The dirt, grass, and sidewalks around the building should slope away from the building to prevent water collecting next to the building (Weeks and Grimmer, *Guidelines*, 102). A bus stop is located one half a block from the front of the museum, offering easy access to potential museum patrons (Figure 2).

## Check Use of Funds/Review Requirements

Before the National Preservation Act of 1966 authorized rehabilitation tax credits, most old buildings were demolished rather than rehabilitated. Since 1966, however, tax

incentives have encouraged private investors to preserve historic buildings, thus offering a strong alternative to government-owned facilities.

According to the U.S. Department of the Interior's guidelines, Federal Historic Preservation: Tax Incentives (p. 2), to qualify for the 20 percent rehabilitation tax credit, rehabilitation projects must meet the following standards, as interpreted by National Park Service:

1. *A building contributing to the historic significance of a district is one which by location, design, setting, materials, workmanship, feeling and association adds to the district's sense of time and place and historical development.*
2. *Ordinarily buildings that have been built within the past 50 years shall not be considered to contribute to the significance of a district unless a strong justification concerning their historical or architectural merit is given or the historical attributes of the district are considered to be less than 50 years old.*

The post office contributes to the historic district by operating as Galena's sole post office 140 years, far exceeding the 50-year requirement. Currently, the federal government owns the post office, but it the post office was sold to a private investor, they could benefit from the tax credits. This tax credit will provide an additional financial incentive for the relocation of the museum.

## CONCLUSION

The proposed design solution must meet the eleven criteria (quoted below) set by the City of Galena's 1989 Historic Preservation Ordinance (p. 2). Following each criterion, I summarize how I have incorporated the constraints of this ordinance into the proposed design:

*1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*

This building was constructed to house the U.S. post office on the first floor and the customhouse on the second. The design proposal retains a satellite post office on first. The customhouse closed in 1913 and no longer is a possible tenant. Town meetings have been held on the second floor since at least 1861, including a homecoming in honor of General Ulysses S. Grant in August 1865. If this second-floor space is allocated to the museum, as proposed, Civil War artifacts could commemorate Grant's homecoming.

*2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*

The property consists of the original 1858 building designed by Ammi Burnham Young and three later additions that house a boiler, woodshed, and loading dock. The three additions originally were constructed to support the post office. Removing the three additions and constructing the museum addition can be reasonably construed as part of modernizing the property to support the original structure. The proposed museum addition introduces new mechanical and electrical systems into the original building without loss of

historical features or materials. The elevator provides disabled patrons access to the second floor of the post office. The space can now hold public functions that could be accessible by all potential patrons and Galena citizens.

*3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.*

Appendix A contains a historical summary of significant alterations to the post office. The changes made to the museum have been in support of activities necessary for postal operations. The changes in the rehabilitation proposal use the proposed program definitions to offer a rationale for restoring original spaces historic to the post office. All the proposed changes are supported by historical documentation in drawings and photographs.

*4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.*

The proposal removes spaces and features that once held historical significance in there own right. The three additions, stamp vaults, and existing restrooms were all removed based on the rehabilitation proposal. The spaces and features are no longer vital to the operation of the post office. The new addition provides ADA accessible restrooms, a new elevator for accessibility, and new mechanical and electrical equipment supplying improved air, light and temperature quality.

*5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*

A few examples of distinctive features are the lobby screen wall, cast-iron stairs, and limestone façade. The screen wall is composed of wood and metal supports producing beautiful arches above the post office boxes and customer windows. The proposal retains the existing composition of interior windows and relocates the eastern portion to its original position. The distinctive cast-iron elevation of the stair is recreated from the removal of the stamp vaults, leaving an unobstructed view of the cast-iron detailing. The façade is composed of the best-quarried marble in the Midwest. The limestone was laid with impeccable craftsmanship ensuring the buildings longevity.

*6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.*

One example of a deteriorated historic feature is the southwest chimney and its flue, which extend down the southern side of the post office. The chimney was replaced with a brick and molded concrete to match original design. The limestone balustrade and original pitch of the roof was altered over the building's history. The rehabilitation proposal replaces the limestone balustrade from the building's historical documentation. The pitch of the roof is lowered to its original slope. The new limestone balustrade and original roof slope establishes the buildings original Italianate design.

*7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.*

The limestone façade is soiled from years of seasonal weathering. Due to the historical character of the limestone, cleaning the limestone should be undertaken with the gentlest means possible. Each subcontractor responsible for cleaning limestone has his or her own method of cleaning. In order to determine the best cleaning method, each of the bidders will clean a small portion of the limestone facade in an inconspicuous location. The cleaning methods will be compared and the least damaging will be chosen. This approach to bidding will ensure proper cleaning for the entire limestone façade.

*8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

During the construction process existing historical materials and features inside and outside of the building are likely to be damaged. To ensure protection of the historical character, interior floors and walls can be covered with plywood and plastic to preserve the existing finish. Access to the historical areas under construction can be coordinated through less historical areas. Scaffolding can be used, for example, to access the second floor without increasing construction traffic on the historical stair. The addition will also provide ample access to the second floor of the post office without additional traffic on the historic stair.

*9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.*

The east and west façade of the addition is constructed out of limestone. The stone pattern matches the dimensions used on the façade of the post office. The reveal between the

post office and addition and the south side of the addition is constructed out of brick. Galena manufactures a brick that matches the dimensions, color and texture of the original brick made during the cities boom period. The brick was chosen to emphasis a color and texture difference between the addition and the post office. The brick also saves money compared to the price of using limestone. The museum addition is lower in elevation to emphasize the importance of the original structure. The width and length of the addition is similar in dimension compared to the post office. The façade of the addition exhibits a wainscot and capital design similar to the post office.

*10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

The museum addition will be designed to house all new loads required for the mechanical and electrical equipment. With the new loads in the addition, the existing post office will not require additional columns or beams within the historic post office. The connection between the post office and addition will be designed by a structural engineer for the future removal of addition without impacting the structural integrity or historic character of the post office.

*11. The quality of materials and craftsmanship used in the rehabilitation project must be commensurate with the quality of the materials and craftsmanship of the historic building in question. Certain treatments, if improperly applied, or certain materials by their physical properties, may cause or accelerate physical deterioration of historic buildings. Inappropriate physical treatments include, but are not limited to: improper tuckpointing techniques; improper exterior masonry*

*cleaning methods; or improper introduction of insulation if damage to historic fabric would result. In almost all situations, use of these materials and treatments will result in denial of certification. Similarly, exterior additions that duplicate the form and material and detailing of the structure to the extent that they compromise the historic character of the structure will result in denial of certification. For further information on appropriate and inappropriate rehabilitation treatments, owners are to consult the* ***Guidelines for Rehabilitating Historic Buildings*** *published by the National Park Service or contact the City Building Department. 'Preservation Briefs' and additional technical information to help property owners formulate plans for the rehabilitation, preservation and continued use of historic properties consistent with the intent of the Secretary's Standards for Rehabilitation are available from the State Historic Preservation Officer, the National Park Service regional offices and the City Building Departments. Owners are responsible for procuring this material as part of properly planning for a certified rehabilitation* (Illinois, *Ordinance,* 2).

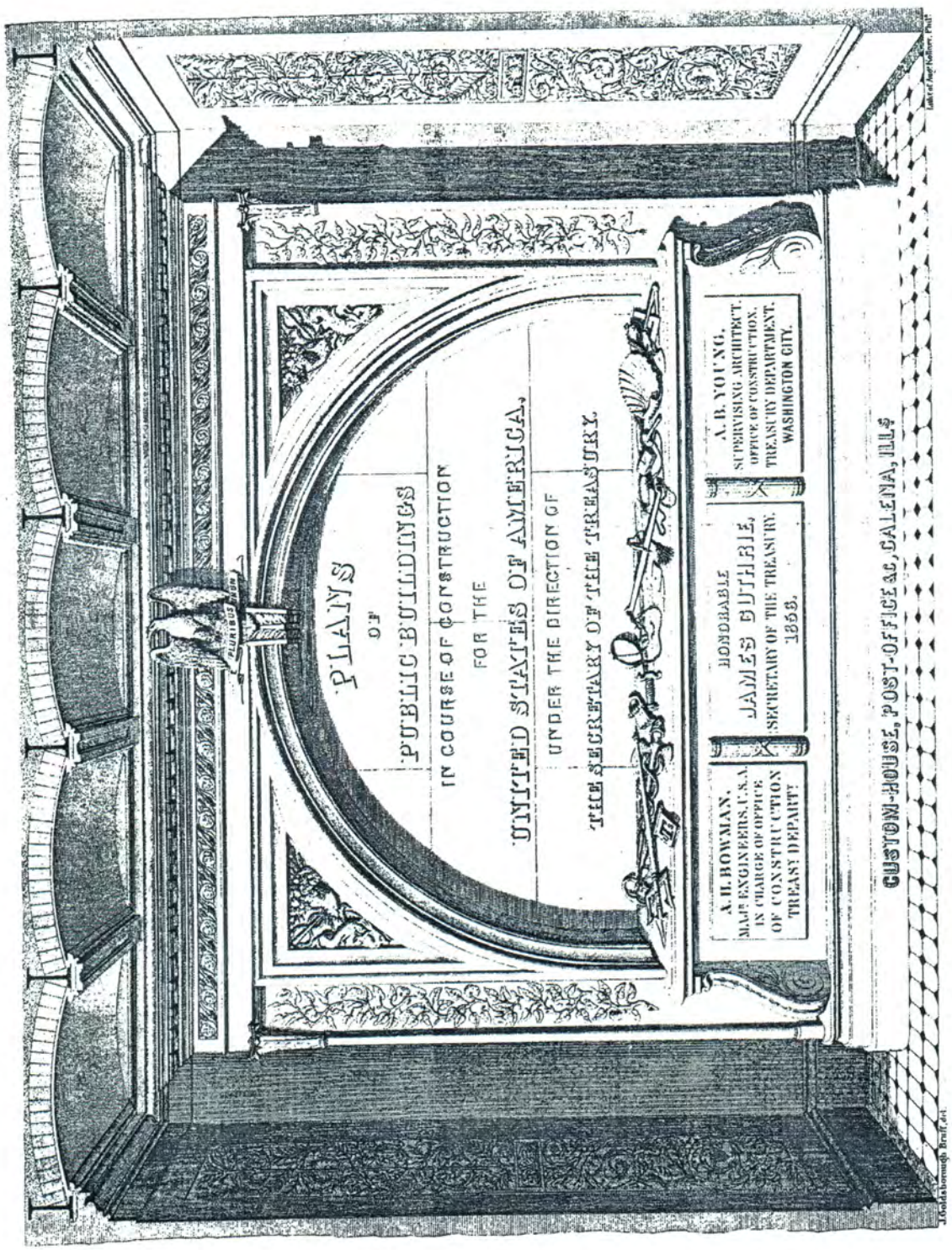
This eleventh standard in the city's Historic Preservation Ordinance recommends using *Preservation Briefs* and other official documents to determine the technical methods appropriate for the rehabilitation of old buildings. I incorporated the U.S. Department of the Interior's *Checklist for Rehabilitating Historic Buildings* as the methodology for rehabilitating the Galena Post Office. Preservation Briefs were used in various ways to outline proper methods and techniques for preserving, maintaining, and replacing historic materials and features.

The proposed rehabilitation project offers benefits to the community and a new home to the museum. The number of patrons for the museum would presumably increase, due to the museum's new location and accessibility to the handicapped, thus increasing the

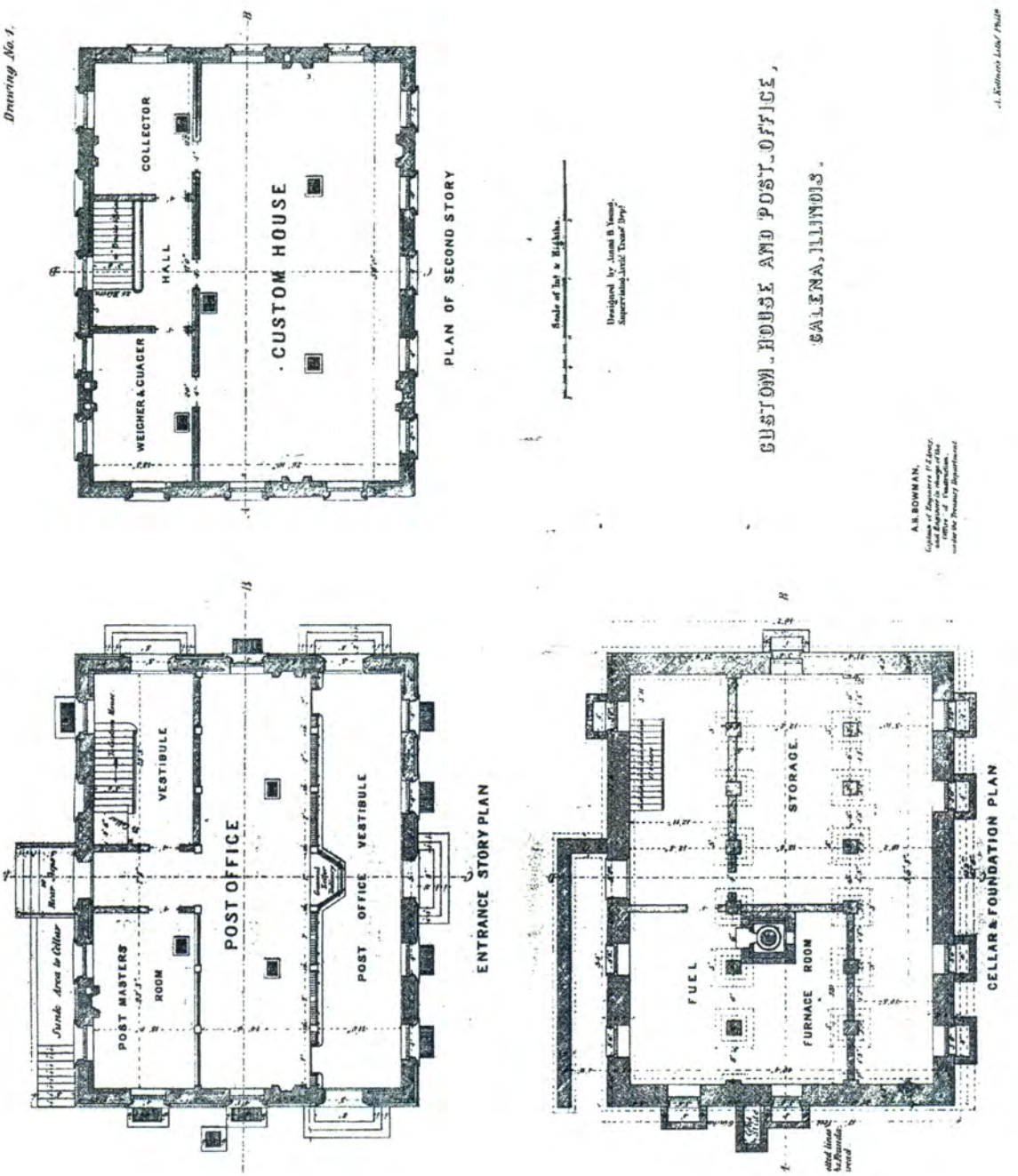
museum's revenues. Additional public restrooms will help support the growing tourism industry and an addition ADA entrance into the historic lobby will open the facility to the entire Galena population. The eleven points state the design requirements necessary to modify a historic structure for an alternate use. The proposal describes and illustrates the eleven points required to relocate the Galena-Jo Daviess Historical Society and Museum into the 1858 Galena Post Office/Customhouse designed by Ammi B. Young.

# APPENDIX A - 1856 GALENA POST OFFICE/CUSTOMHOUSE DRAWINGS

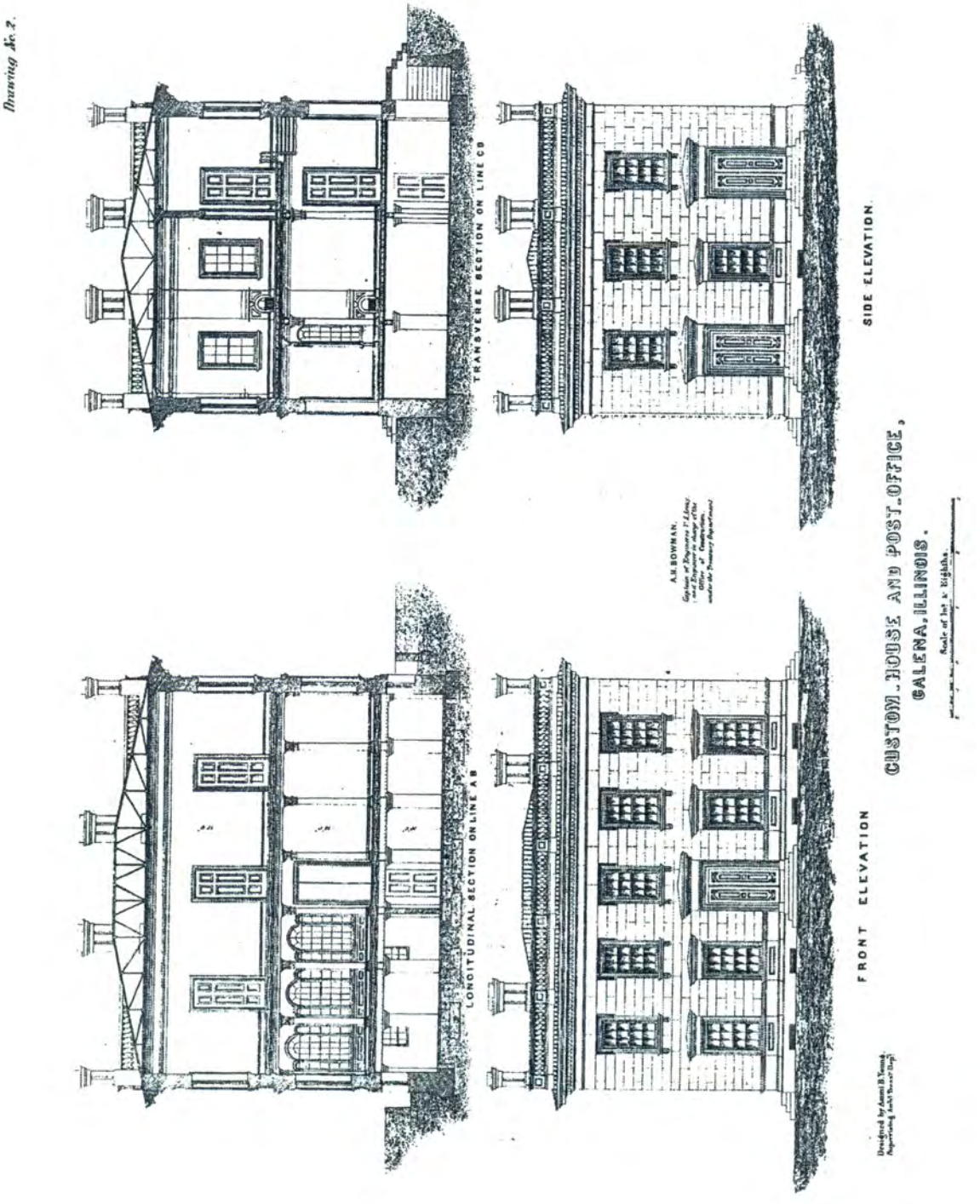
## Drawing 1



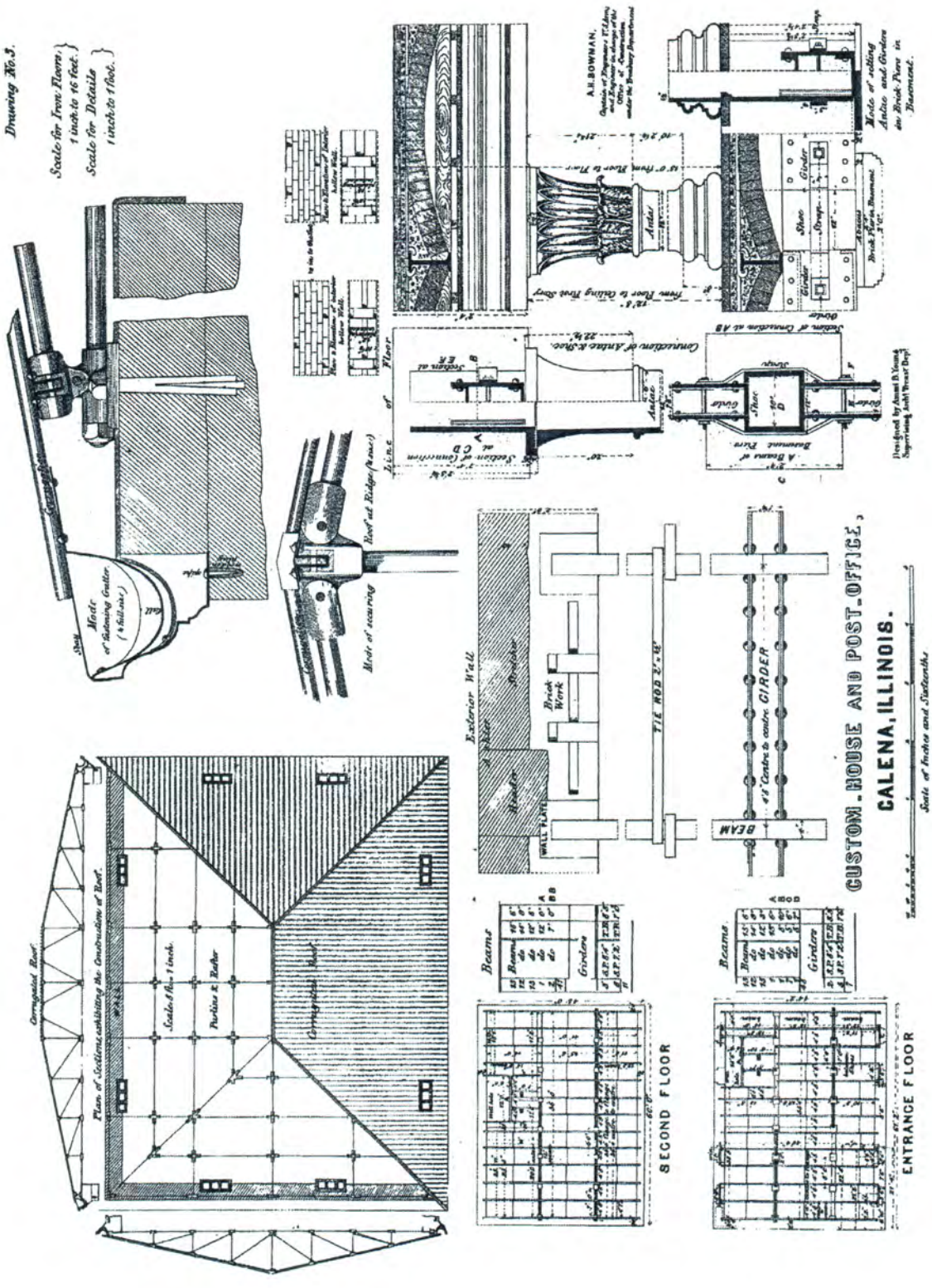
## Drawing 2


Drawing No. 1.
COLLECTOR
HALL
WEIGHER & GUAGER
CUSTOM HOUSE
PLAN OF SECOND STORY
Scale of Inch = Eighths.
Designed by James B Yeomd. Superintending Archt Treasr Dept
CUSTOM HOUSE AND POST-OFFICE,
GALENA, ILLINOIS.
A.B. BOWMAN,
VESTIBULE
POST MASTERS ROOM
POST OFFICE
VESTIBULE
ENTRANCE STORY PLAN
STORAGE
FUEL
FURNACE ROOM
CELLAR & FOUNDATION PLAN

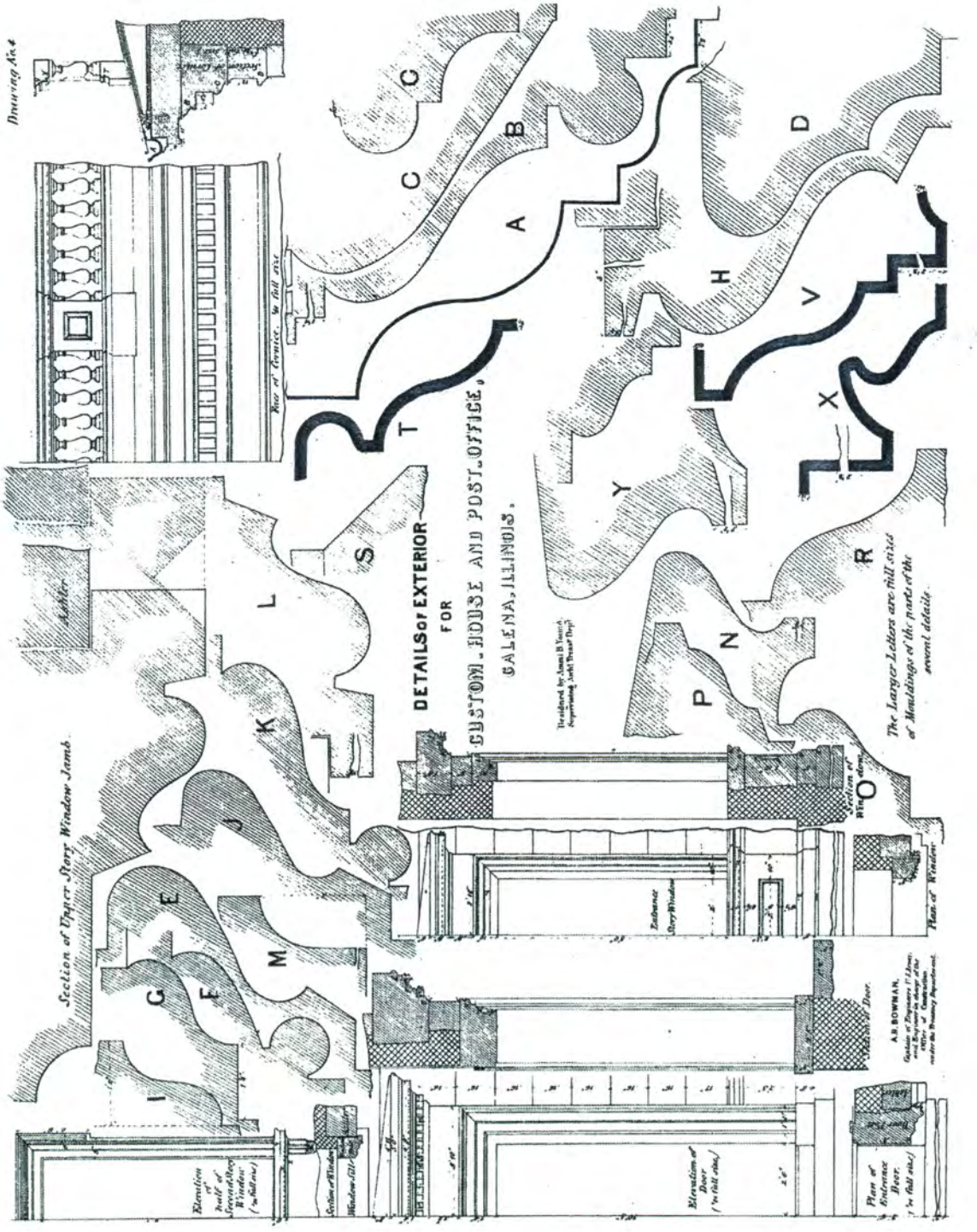
## Drawing 3


Drawing No. 2.
TRANSVERSE SECTION ON LINE CD
SIDE ELEVATION
A.B. BOWMAN.
LONGITUDINAL SECTION ON LINE AB
FRONT ELEVATION
CUSTOM-HOUSE AND POST-OFFICE,
GALENA, ILLINOIS.

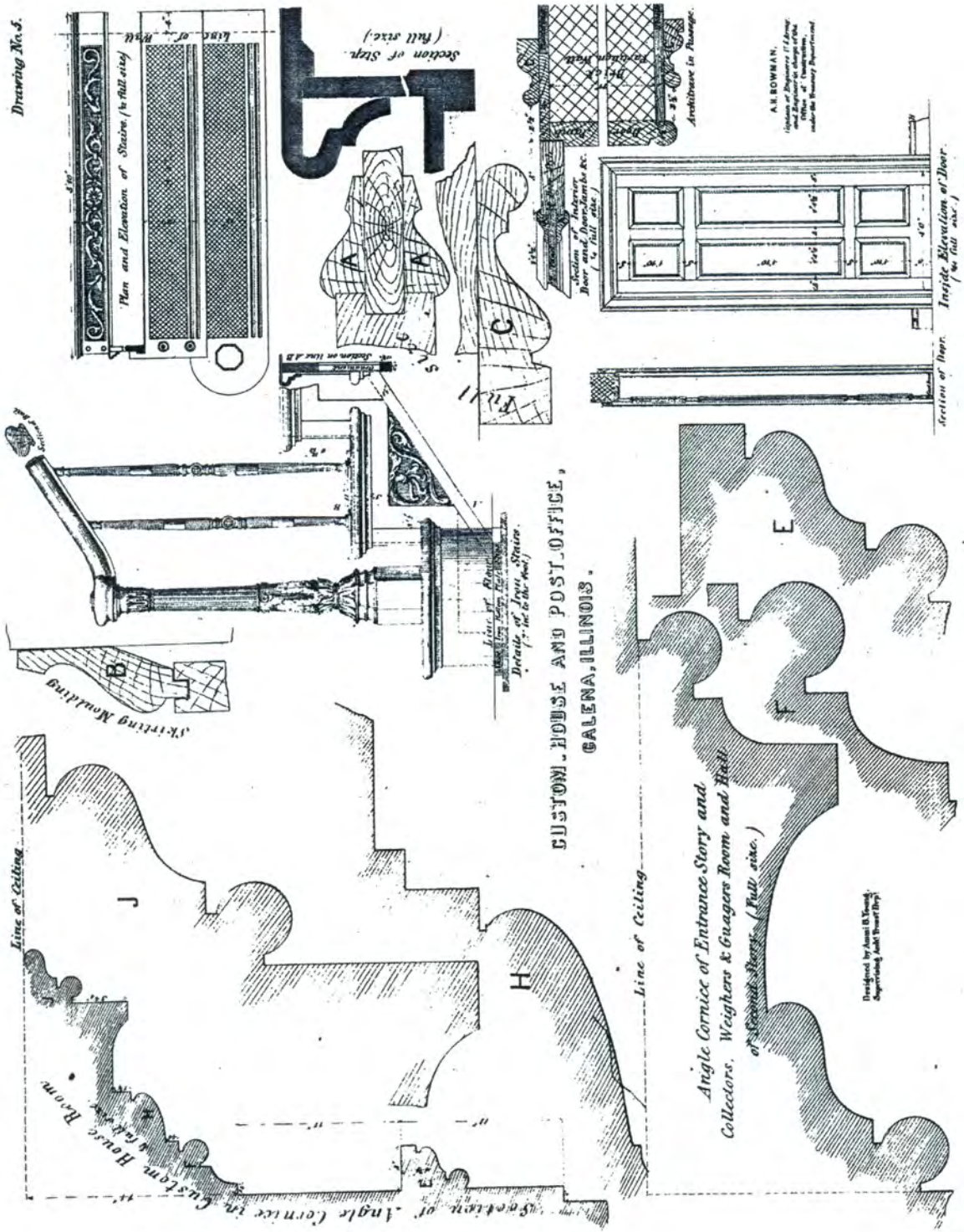
## Drawing 4


Drawing No. 3.
Scale for Iron Floors. 1 inch to 16 feet.
Scale for Details 1 inch to 1 foot.
Plan of Sections exhibiting the Construction of Roof.
Corrugated Roof.
Scale of Iron 1 inch.
Portico & Rafter
Corrugated Roof
Exterior Wall
Brick Work
Header
WALL PLATE
TIE ROD 2" x 8"
BEAM
4'0" Centre to centre GIRDER
Roof at Ridge (Iron)
Mode of securing
Mode of Gutering Gutter
Beams
Girders
SECOND FLOOR
ENTRANCE FLOOR
CUSTOM-HOUSE AND POST-OFFICE,
CALENA, ILLINOIS.
A. H. BOWMAN.

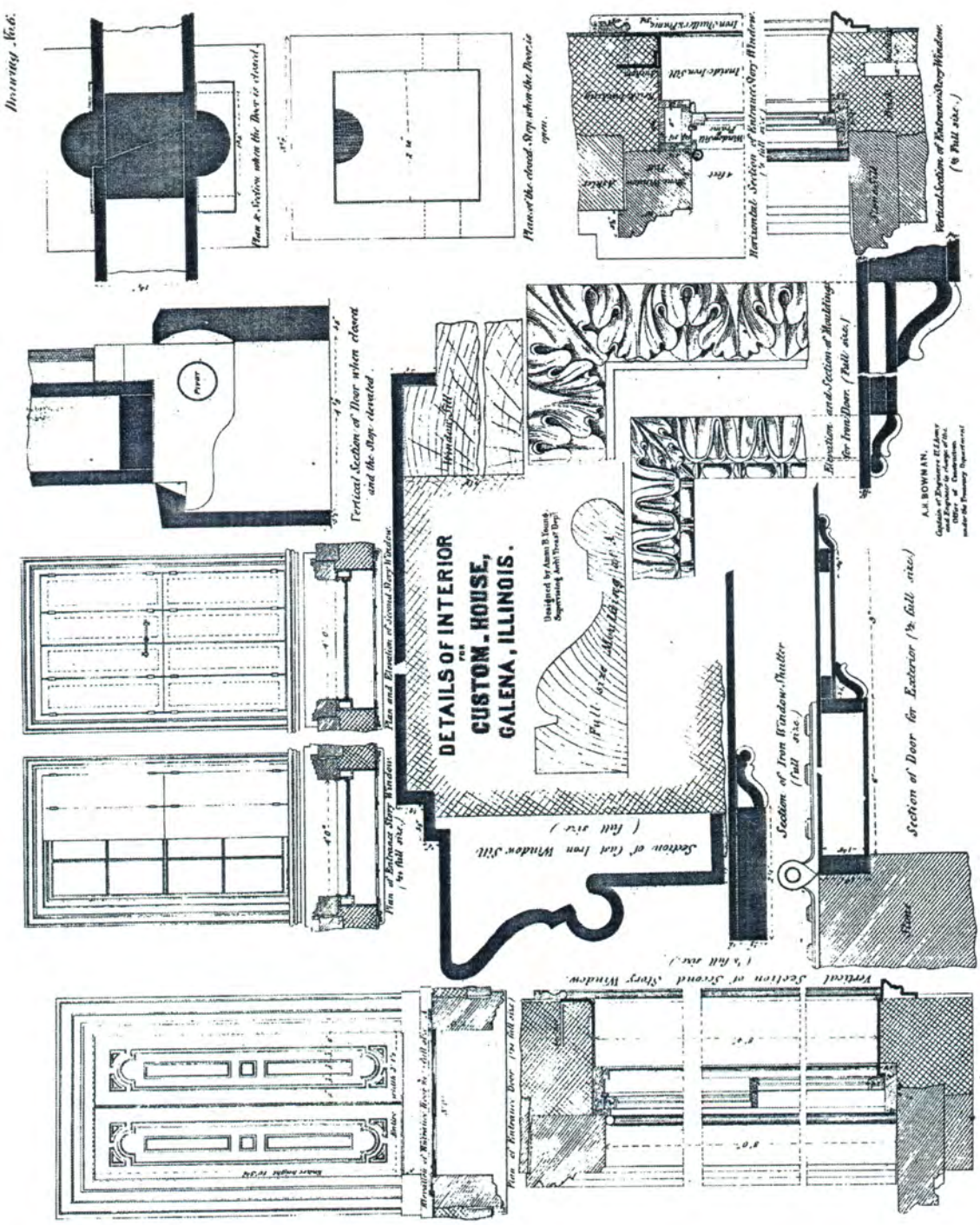
## Drawing 5


DETAILS of EXTERIOR
FOR
CUSTOM-HOUSE AND POST-OFFICE,
GALENA, ILLINOIS.
Section of Upper Story Window Jamb.
Elevation of Door (½ full size)
Plan of Entrance Door. (½ full size)
The Larger Letters are full size of Mouldings of the parts of the several details.

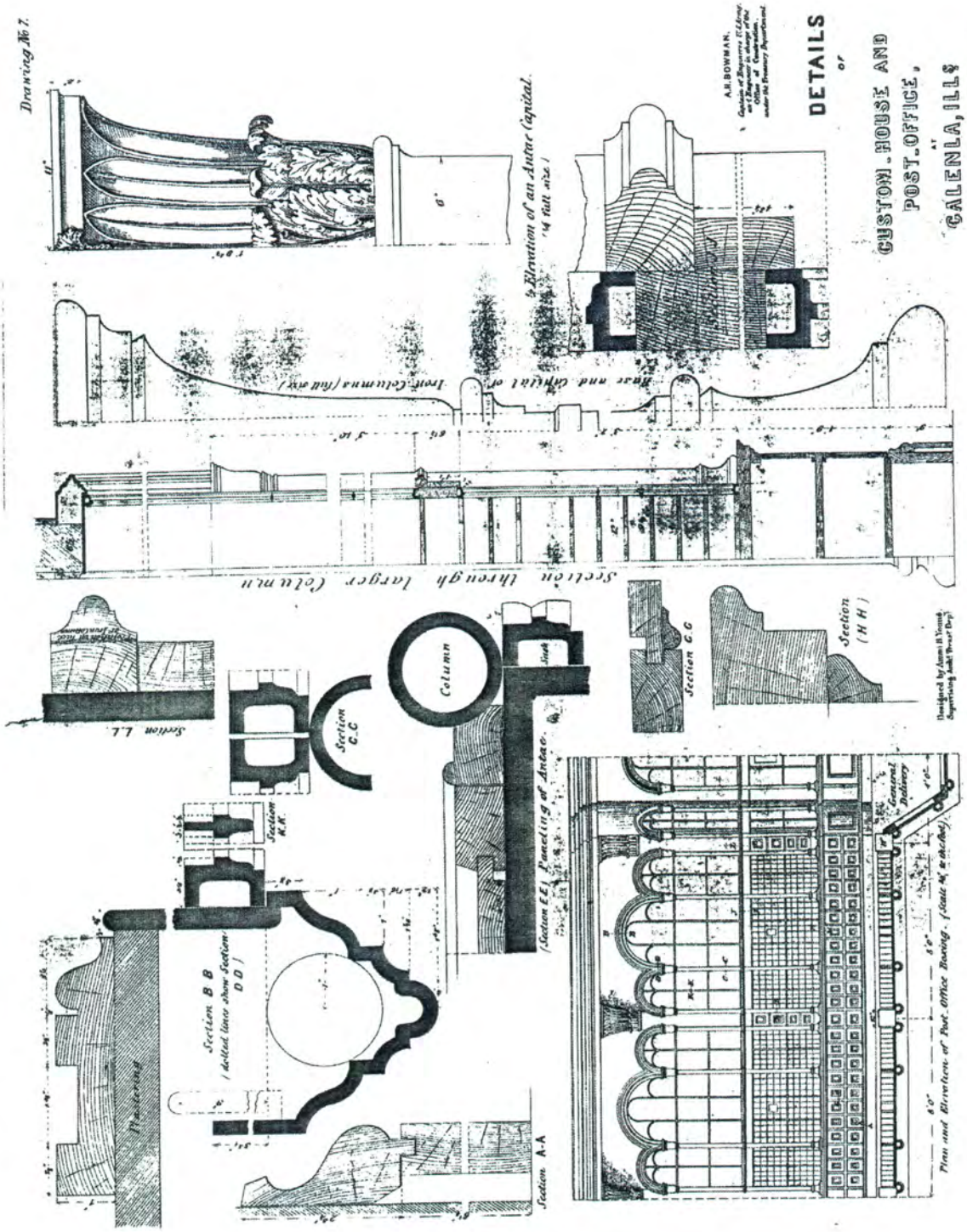
## Drawing 6


Drawing No. 5.
Plan and Elevation of Stairs (½ full size)
Section of Stair (full size)
Section of Door.
Inside Elevation of Door (½ full size)
Architrave in Passage.
A.B. BOWMAN.
Skirting Moulding
Details of Iron Stairs (½ full size)
CUSTOM HOUSE AND POST OFFICE,
GALENA, ILLINOIS.
Angle Cornice of Entrance Story and Collectors, Weighers & Gaugers Room and Hall of Second Story. (Full size.)
Line of Ceiling
Line of Ceiling
Section of Angle Cornice in Custom House Room
Designed by Ammi B. Young, Supervising Arch't Treas'y Dep't.

## Drawing 7


DETAILS OF INTERIOR
OF THE
CUSTOM-HOUSE,
GALENA, ILLINOIS.
A.H. BOWMAN,
Section of Door for Exterior (½ full size.)
Section of Iron Window-Sash (full size.)
Vertical Section of Second Story Window.
Plan of Entrance Door (½ full size.)
Plan and Elevation of Second Story Window.
Plan of Entrance Story Window.
Vertical Section of Entrance Door when closed and the Step elevated.
Plan of the closed Step when the Door is open.
Plan & Section when the Door is closed.

## Drawing 8


DETAILS
OF
CUSTOM-HOUSE AND
POST-OFFICE,
AT
GALENA, ILLS
A.B. BOWMAN.
Drawing No 7.
Elevation of an Antae capital.
Section through larger Column
Section E.E. Panelling of Antae.
Column
Section C.C
Section K.K
Section B B
Section A-A
Section L.L
Section G.G
Section (H H)
Plan and Elevation of Post Office Boring.

## APPENDIX B - HISTORICAL SUMMARY

In 1837, Ammi Burnham Young, an architect, designed the Boston Customs House, a very ambitious structure for the time. The construction took ten years and cost over one million dollars. In April 1844, three years before the project's completion, Arthur Gilman, a young architectural critic, attacked Young's design in "Architecture in the United States," published in the *North American Review:* "We are firm in our belief that the introduction of Grecian architecture among us has been a great mistake. Its edifices belong to another climate; they are the legitimate offspring of a remote age, an antagonistic religion, an obsolete form of government, and a widely different state of society from our own. With us they have no concern" (Smith, 102). Gilman urged architects to be creative, to express the character and uniqueness of the region, and not to replicate forms of the past (Smith, 102).

Part of Gilman's critique was the standardization of design, which he called "Procrustes' bed, on which the relentless measure of all our public and private wants and uses is taken." Public buildings in the Greek Revival style, he claimed, obstructed light, "shut in the view," and dictated the inclusion of features unnecessary for "convenience, construction, and propriety" (Bluestone, 134).

While part of Gilman's audience may have had an uncertain grasp of the aesthetic principles he was promulgating, they almost certainly agreed with his next point, which was the costliness of large government construction projects. The Boston Custom House was an irrefutable example. He urged instead the merits of a "palazzo style," based on designs created by the English architect Charles Barry. Using Italian Renaissance designs, Gilman claimed, would require only a third as many materials and create more functional buildings (Bluestone, 134).

In the 1850s customshouses accounted for approximately 95 percent of the revenue generated by the federal government (Bluestone, 132). The balance came from federal land sales. Thomas Corwin, Secretary of the Treasury in 1853, deemed it "highly desirable" for

the federal government to purchase its own customhouses instead of renting properties (Bluestone, 132). Corwin argued that purchasing would save the federal government as much in rent as it would in interest earned from the surplus revenue.

Senators and Congressmen supported this plan and authorized the first federal buildings in numerous small ports and cities east of the Mississippi River. Ammi B. Young was hired as Supervising Architect for the Department of the Treasury to design the customshouses. Ammi B. Young adopted the "palazzo style" as the basis of his design. The style increased the number of windows, allowing additional light into the interior spaces. Young's prototypical design allowed the overall building dimensions to vary, while retaining a distinctive style. Typical window openings were evenly spaced based on the building length to achieve a standard design.

An act of Congress on August 18, 1856, authorized the construction of the Galena Post Office and Customhouse. Ammi B. Young, supervising architect, and A. H. Bohman, major engineer in charge of the Office of Construction for the Treasury Department, designed the Galena Customs House in Italianate style (See Appendix B). The federal government purchased a triangular plot of 0.253 acres for $16,500 on May 7, 1857. The plot was bounded on the northwest by Commerce Street, on the northeast by Green Street and on the south by Water Street (Krumbiegal, 129).

The Galena Post Office and Customhouse was completed and occupied in August 1858. The *Weekly Northwestern Gazette* reported the formal opening on August 9, 1858: "The whole building is quite a different affair from the miner's cabin that many of us were glad to regard as our castle when we first came to this part of the country to reside." (United

States, *Come Visit...*, 3). The final cost of construction was recorded at $61,372.44 (United States, *Come Visit...*, 1).

On October 29, 1858, a triangular lot, created where Green and Commerce Streets joined Water Street, was added to the site making a rectangular lot with 76.25 feet on Commerce Street and 72.83 feet on Green Street (Krumbiegal, 129)

According to the *Galena Daily Advertiser* on November 16, 1861, the second floor of the customshouse, decorated with flags and patriotic paintings, was the scene for a social gathering which successfully raised money for the North during the Civil War (United States, *Commemoration,* 3). The ladies of Galena also gathered on the second floor to roll bandages as reported by the *Galena Daily Advertiser* on December 2, 1862 (United States, *Commemoration,* 3)

On August 19, 1865, the *Galena Gazette and Advertiser* reported that the most famous of Galena's soldiers, General Ulysses S. Grant, "gave a homecoming reception at the Post Office where he was visited by a large number of persons, who shook him by the hand" (United States, *Commemoration, 3*).

In May 1866, *Harpers New Monthly Magazine* published an etching of the "United States Customhouse and Post-Office in Galena, Illinois." This is the earliest known visual representation of the building. At that point, the building had a flatter roof and a balustrade extending around the perimeter of the roof. A concrete sidewalk encircles the property. The steeper-pitched roof and flagpole were obviously added after 1866.

In 1883, a woodshed was constructed on the lot south of the post office (McGuire, 6).

A boiler was installed in the late 1800s replacing the eight original fireplaces. The boiler was located in the basement of the post office and the piping ran vertically on the

building's south side to six radiators on first and second floor. The first floor had an additional radiator located in the center of the mailroom. The existing fireplaces were used as return air ducts operating solely on convection currents.

In 1907, James Knox Taylor, Supervising Architect for the Treasury, developed a set of drawings connecting an existing sewer line to a new manhole on the east side of the building. The drawings show the downspouts from the post office draining into the sewer line emptying into the Galena River. The plans also show a roof slope of 4½ to 12, which is steeper than the original roof design. The new roof must have been installed at this time, and the balustrade was removed at this point, if not earlier. Also that year, a new boiler and two restrooms, one on each floor, were installed. An outhouse south of the building was removed.

In 1908, Taylor authorized the relocation of the lobby wall, shrinking the size of the existing lobby, three new service windows, and replacing the east doorway with a concrete formed window. The original drawings depict the original lobby size and the existing drawings show the relocation of the eastern lobby wall and doorway replacement.

Taylor further authorized the introduction of electricity in 1911. The electrical line ran from Commerce Street to the main panel located in the basement. The drawing shows exterior light fixtures at the north and west lobby entrances. The drawings show a new partition in the second floor customs room.

P. Campbell photographed the Galena flood in 1911 showing power lines running around the post office and a flagpole on top of the roof.

The Galena Customhouse closed in 1913. Railroad companies transporting goods at a cheaper price replaced riverboat transportation. (United States, *Commemoration,* 3).

A 1924 drawing, prepared by the Department of Treasury, depicts a small vault to be added west of the larger vault. An additional metal column was added in the basement to carry the additional weight of the new vault.

In 1928, Galena suffered another flood, again documented by P. Campbell. In this photograph, the boiler addition stands between the woodshed and the post office. Everything else in the photograph looks identical to the photograph taken in 1911.

In 1964, a drawing from the Design and Construction Division, Region 5, Chicago, Illinois, shows the installation of florescent lighting, a water heater located in the basement, additional concrete curb and gutters at the perimeter of the site, and the relocation of the flag pole next to the three existing parking stalls.

Water Street was relocated during the construction of the flood wall in 1951. Water Street currently runs parallel to the flood wall changing the post office lot once again. (Camiros, 13).

Belli and Belli of Missouri, Inc., architects and engineers from Chicago, completed drawings for the construction of the loading dock, roof crickets around the chimneys, new metal gutters, storm sashes, and miscellaneous limestone repair to the exterior façade in 1964.

In 1969, Galena established a historic district that includes over 90 percent of the entire city and contains approximately one thousand buildings, composed of commercial, public, industrial, and residential buildings, constructed before 1900 regulating new construction and exterior alterations within this historic district (United States, *Register,* 1).

The 1970 Postal Reorganization Act transformed the nation's cabinet-level agency into an independent agency, forcing the U.S. Postal Service to become financially

independent. The change put an extra burden on small post offices that, like Galena's, were trying to maintain their historic personalities. In an attempt to be financially independent the U.S. Postal Service was offered, "statutory exemption from mandatory compliance with real estate-related policies." (Smith, 2). This allowed a decrease in operational costs because the postal service did not have to comply with local, state, or federal preservation requirements.

In 1980, A. M. Kinney Associates, Inc., from Chicago, prepared drawings showing minor masonry restoration and the removal of exterior lighting at the cornice. The new exterior light was installed in the basement window wells illuminating the historic façade of the post office. Minor changes were made to the mailroom counters for ease of operation. Additional ceiling hung fluorescent lighting was installed in the mailroom. New roof drain lines were installed for the loading dock and boiler room additions. The first and second floors were repainted in their original colors based on a paint analysis performed by a subcontractor. The paint analysis was based on historic documentation and by removing existing layers of paint to determine the color of the original layer. (McGuire, 5).

In 1991, Galena's Comprehensive Plan proposed moving the Galena–Jo Daviess Historic Society and Museum into the 1858 post office building (Camiros, 13). The proposal was among several to improve the economic development of the city.

In 1996, Galena built a postal annex on the west side of town to make room for new mail-sorting equipment, but the current Galena postmaster, John O'Shea,[4] plans to maintain a full service station on the first floor of the 1858 post office. The federal government operates and maintains both facilities.

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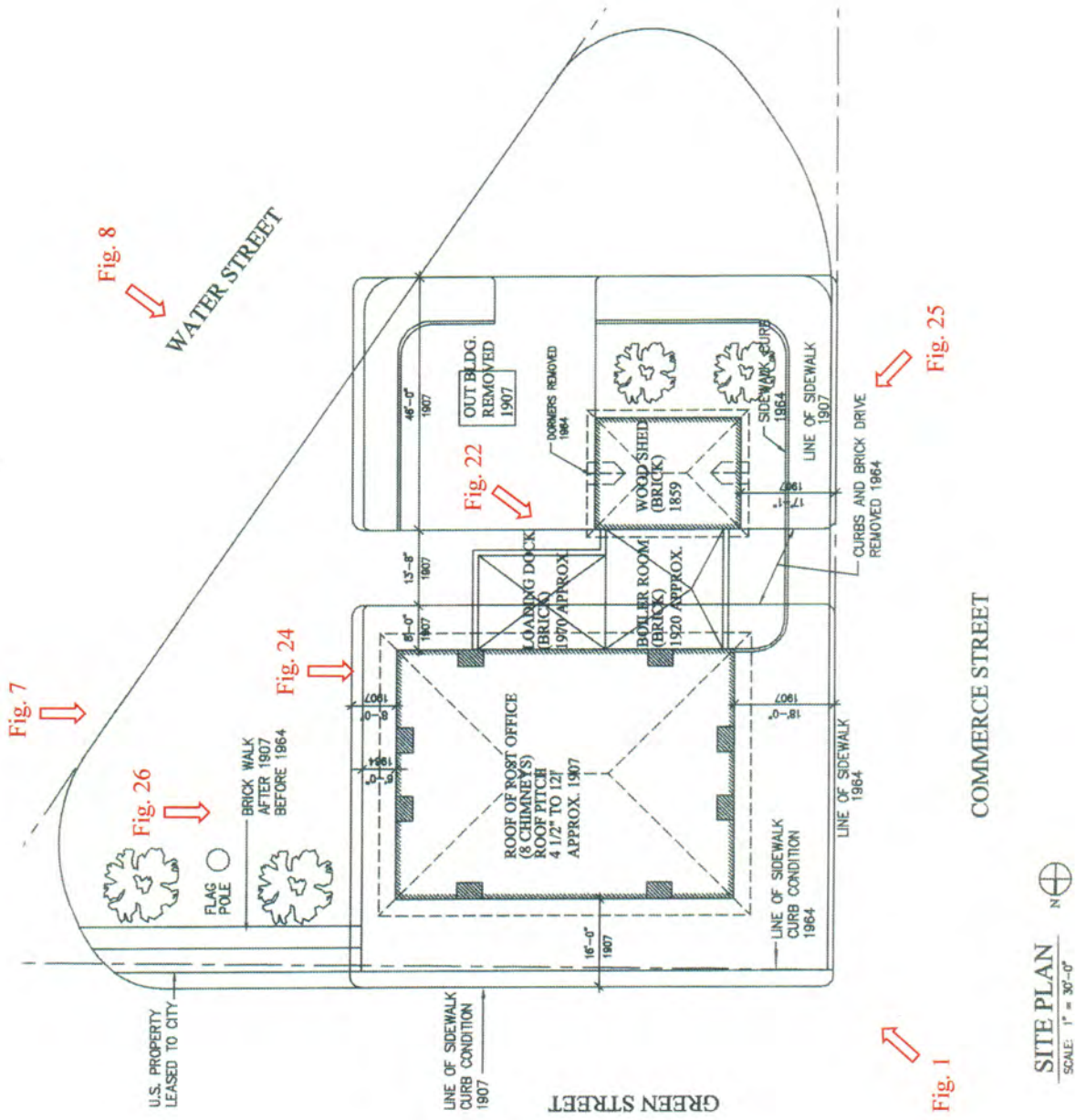
[4] Personal Interview with John O'Shea, Galena Postmaster, 2002.

"According to downtown consumer surveys conducted in the early 1990's by Iowa communities participating in the National Trust's Mainstreet Program, over 80 percent of the people who shopped downtown did so because of the post office" (Smith and Skaggs, 1). Oregon Congressman Earl Blumenauer introduced the 1997 Post Office Community Partnership Act requiring "the USPS to follow specific procedures when making relocation decisions, including community participation, an appeal process, and compliance with local zoning laws" (Smith, 6). The act helps communities have control over the continued operation of the downtown post office.

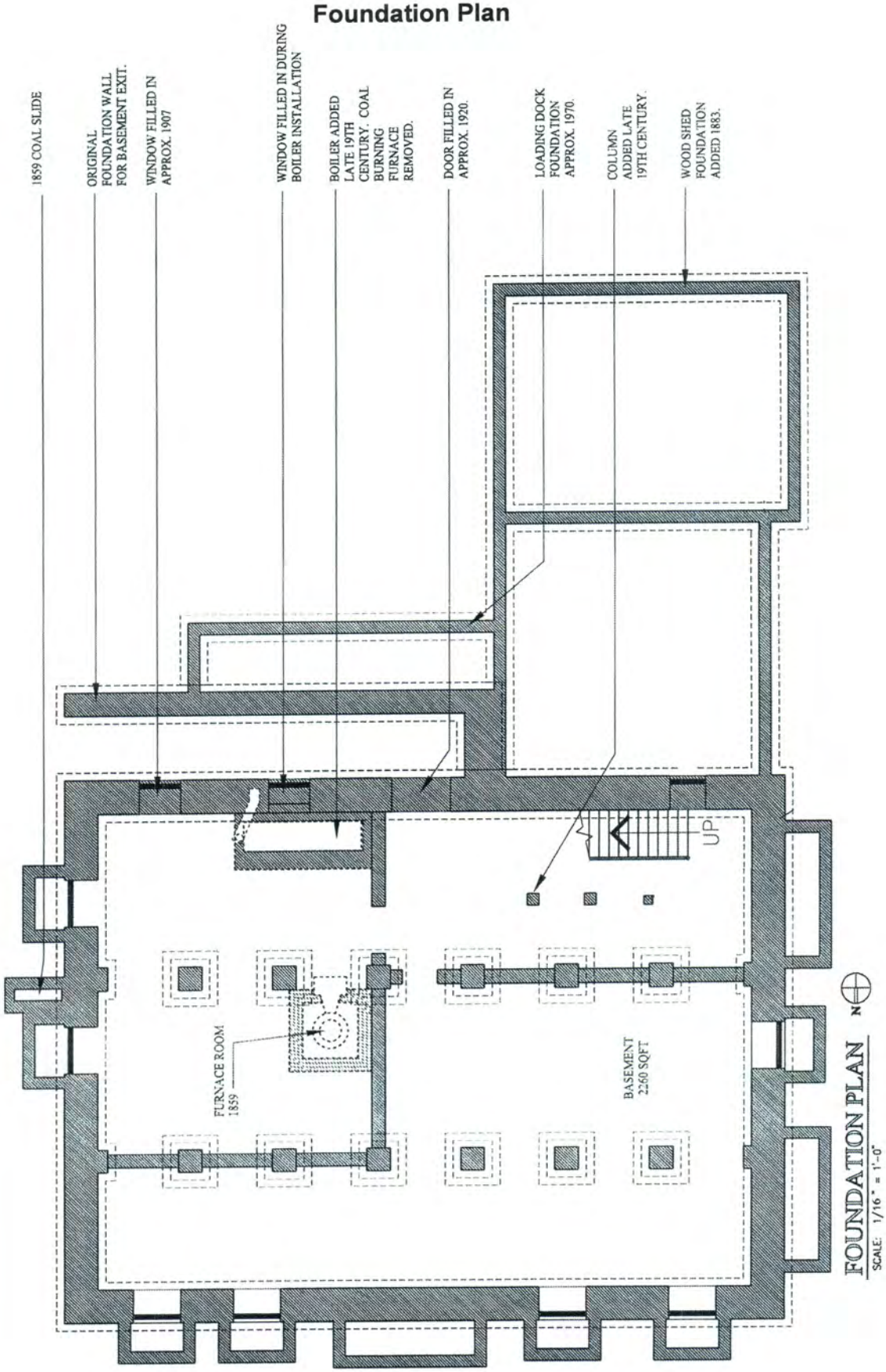
Michael Jackson, the Illinois State Preservation Architect, is developing a plan to make part of downtown Galena a national landmark. Downtown Galena is considered the area between Main and Water Street. Landmark status will allow the city to receive additional funding on a federal level to support the growing historic tourism industry.

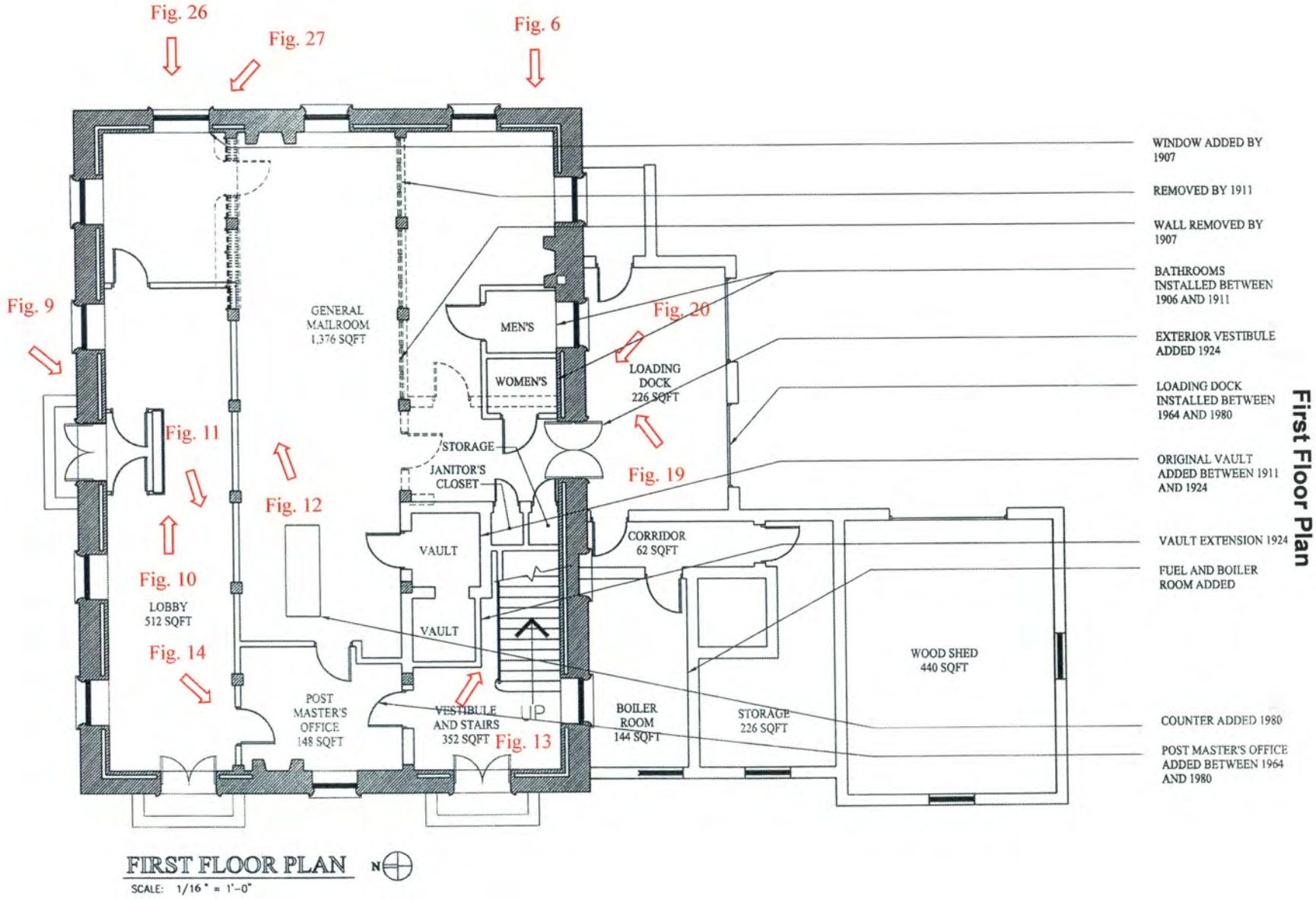
# APPENDIX C - 2002 GALENA POST OFFICE/CUSTOMHOUSE DRAWINGS

## Site Plan



## Foundation Plan



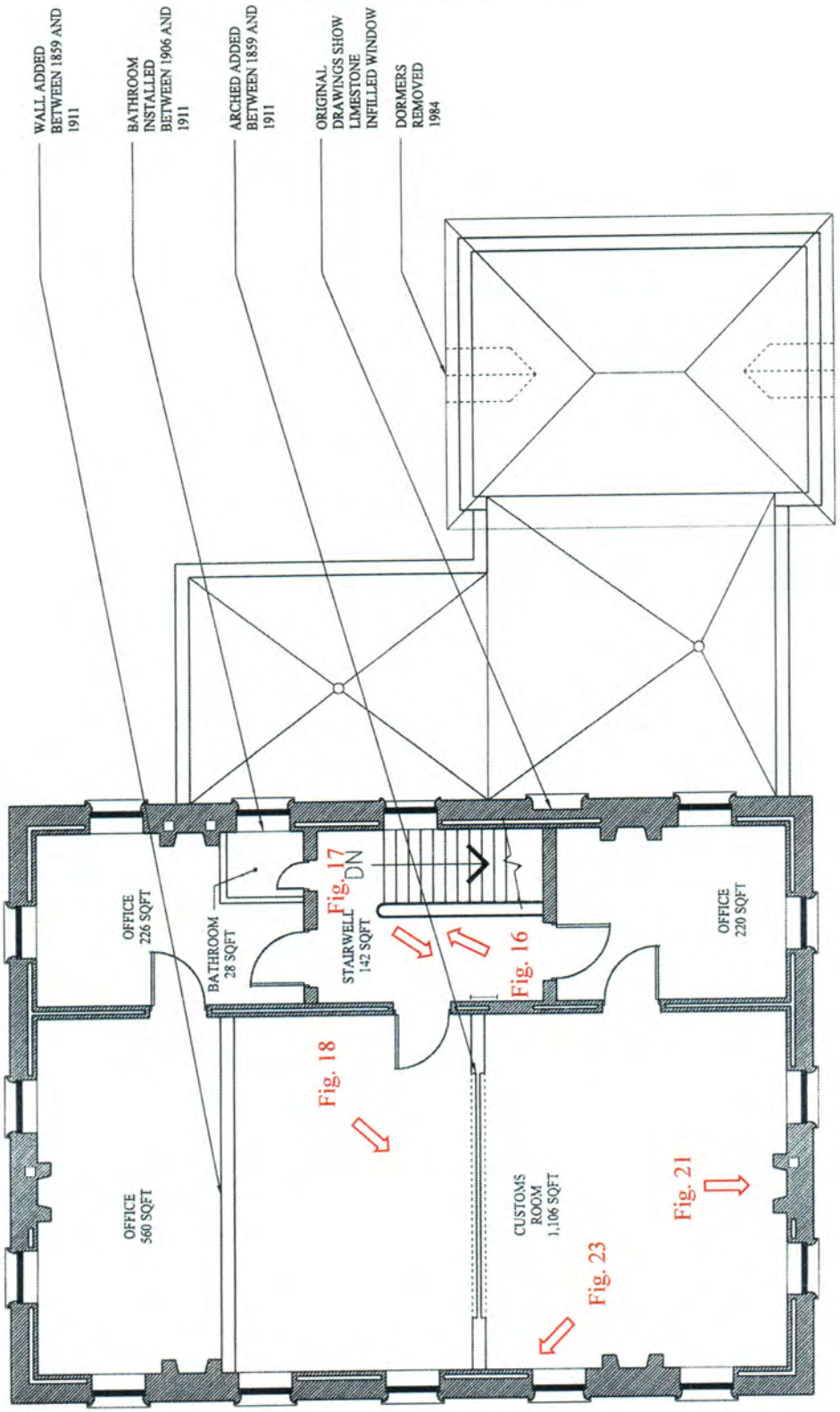



FIRST FLOOR PLAN N

SCALE: 1/16" = 1'-0"

First Floor Plan

## Second Floor Plan




SECOND FLOOR PLAN

SCALE: 1/16" = 1'-0"

## APPENDIX D - PROGRAM DEFINITIONS

**Gift Shop** The gift shop sells tickets to the museum and books about the history of Galena. The person running the gift shop is also responsible for starting the movie projector (See "Movie Room" below).

**Offices** The museum requires two offices. The first is the general business and clerical office; the second is the director's private office.

**Storage** The museum currently stores the artifacts it owns. With appropriate shelving, the artifacts could be organized more efficiently, thus reducing the amount of storage space needed.

**Layout** The layout room is used for preparing and maintaining museum displays. The room requires a table (minimum size 8' x 10') and a double sink.

**Elevator** The current museum does not have an elevator to provide handicapped access. An elevator would be required in the new museum.

**Museum Displays** The Galena-Jo Daviess History and Society Museum displays artifacts relating to the Civil War, lead mining equipment, articles of clothing, a horse-drawn carriage and equipment, a contour model of the area, a large painting of Robert E. Lee's surrender, cookware, and numerous paintings showing scenes in and around Galena.

**Lobby** The lobby of the proposed addition will serve tourists and museum patrons. It will include a customer service desk, furniture, clocks, notice boards, a museum orientation plan, public telephones (TDD), restrooms, museum ticket sales, postcards, and books on the history of Galena.

**Movie Room** The movie room in the current museum introduces the history of Galena with a 10-minute video shown at the beginning of every hour. The proposed museum calls for a movie room approximately 15'-0" x 25'-0" seating twenty people on the first floor. It could be rented as a conference room for small groups numbering no more than twenty five people. The room will also be equipped with technological data processing and telecommunications systems for distance learning and teleconferencing.

## APPENDIX E - SPACE REQUIREMENTS

### EXISTING MUSEUM ROOMS

| | |
|---|---|
| Movie room | 400 SQFT |
| Museum display | 5,792 SQFT |
| Storage | 3,300 SQFT |
| Gift Shop | 300 SQFT |
| **Total Area** | **10,017 SQFT** |

### EXISTING POST OFFICE AND ADDITIONS

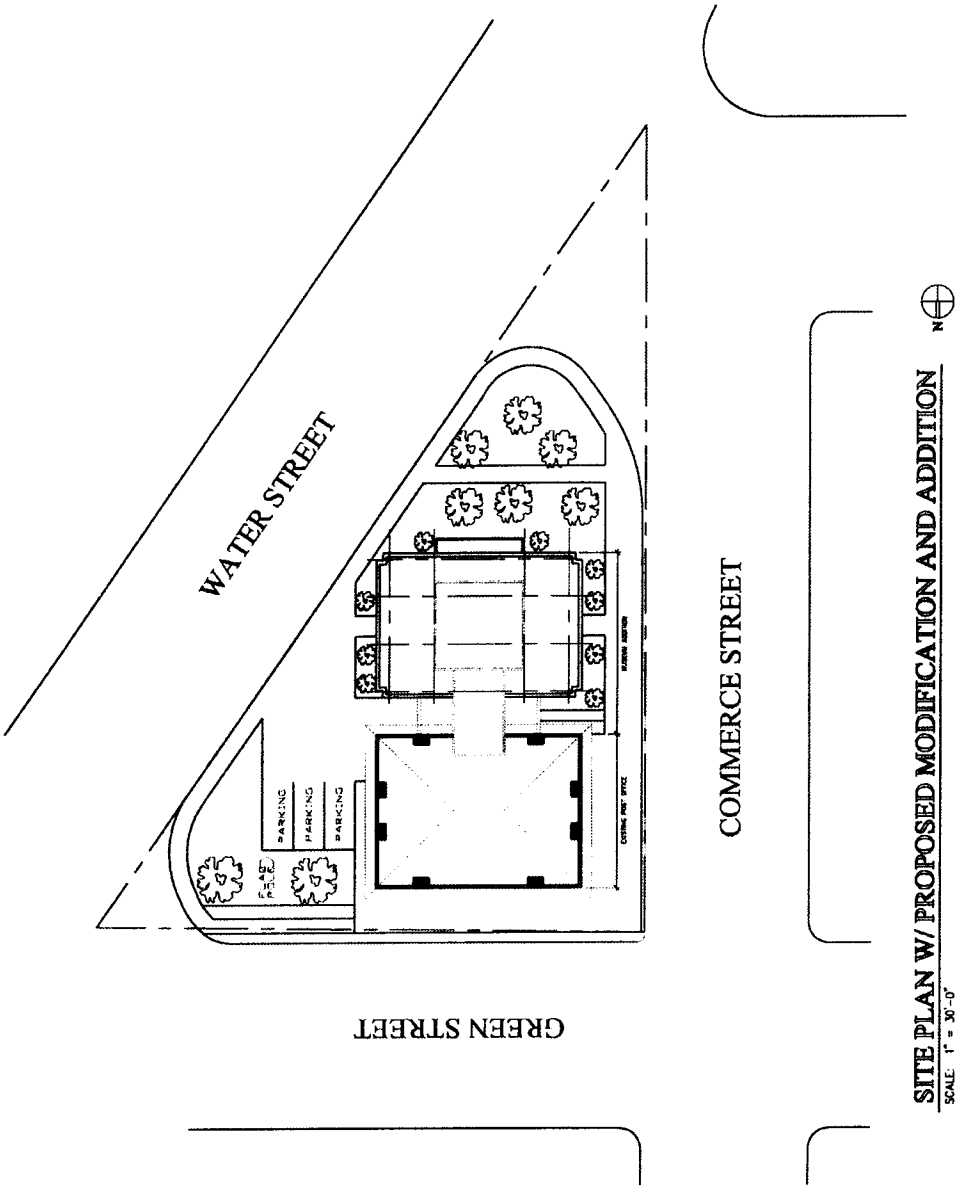
| | |
|---|---|
| Lobby | 512 SQFT |
| General mail room | 1,376 SQFT |
| Vestibule and stairs | 494 SQFT |
| Postmaster's office | 148 SQFT |
| Customs room | 1,106 SQFT |
| Offices | 1,006 SQFT |
| Basement | 2,262 SQFT |
| First floor additions | 1,098 SQFT |
| **Total area** | **8,002 SQFT** |

### REHABILITATION PROPOSAL AND MUSEUM ADDITION

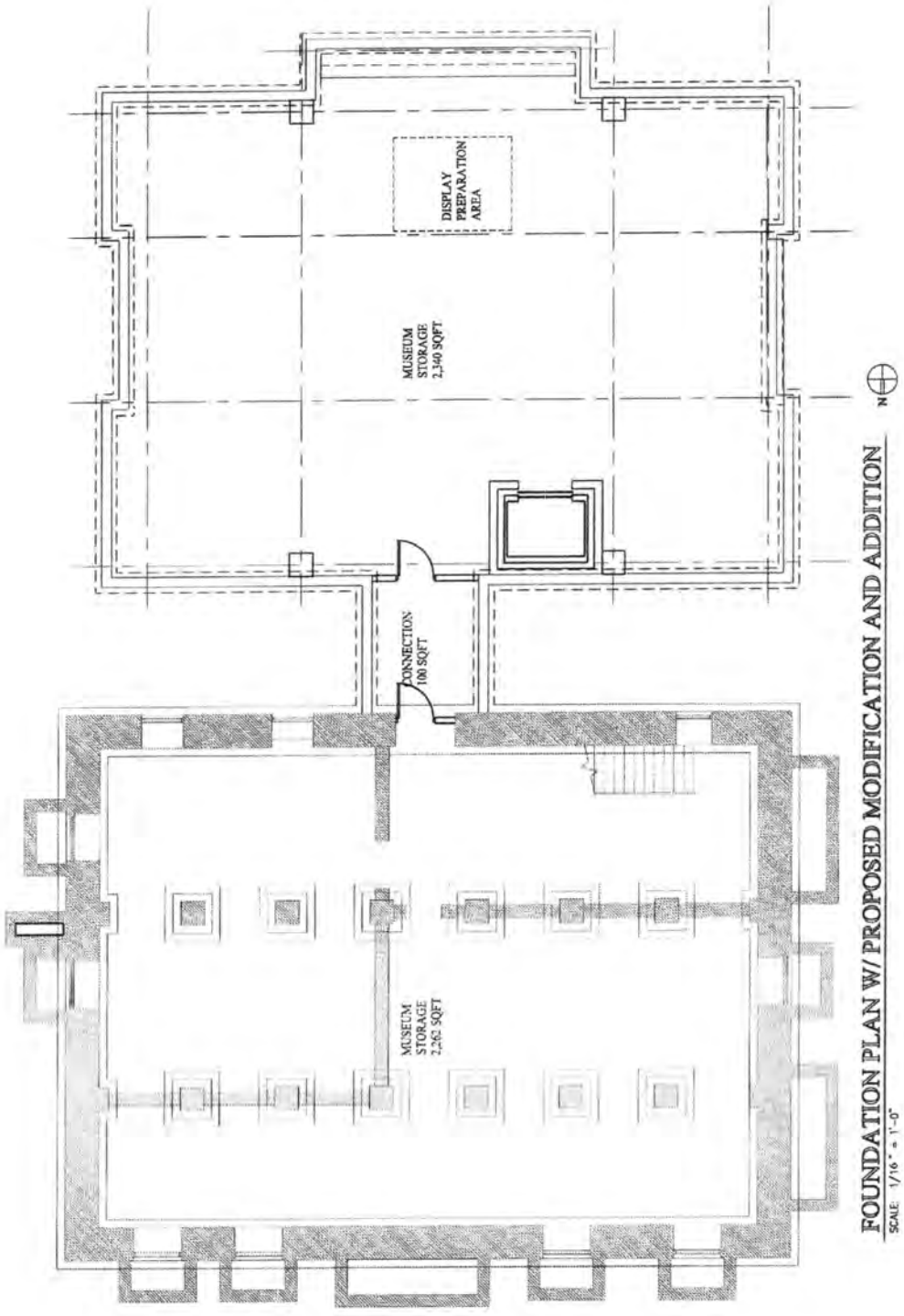
| | |
|---|---|
| Museum offices | 325 SQFT |
| Receiving | 140 SQFT |
| Restrooms | 400 SQFT |
| Museum lobby | 900 SQFT |
| Movie moom | 360 SQFT |
| Museum display | 4,922 SQFT |
| Museum storage and layout room | 4,602 SQFT |
| **Total area** | **11,849 SQFT** |

# APPENDIX F - REHABILATATION PROPOSAL DRAWINGS

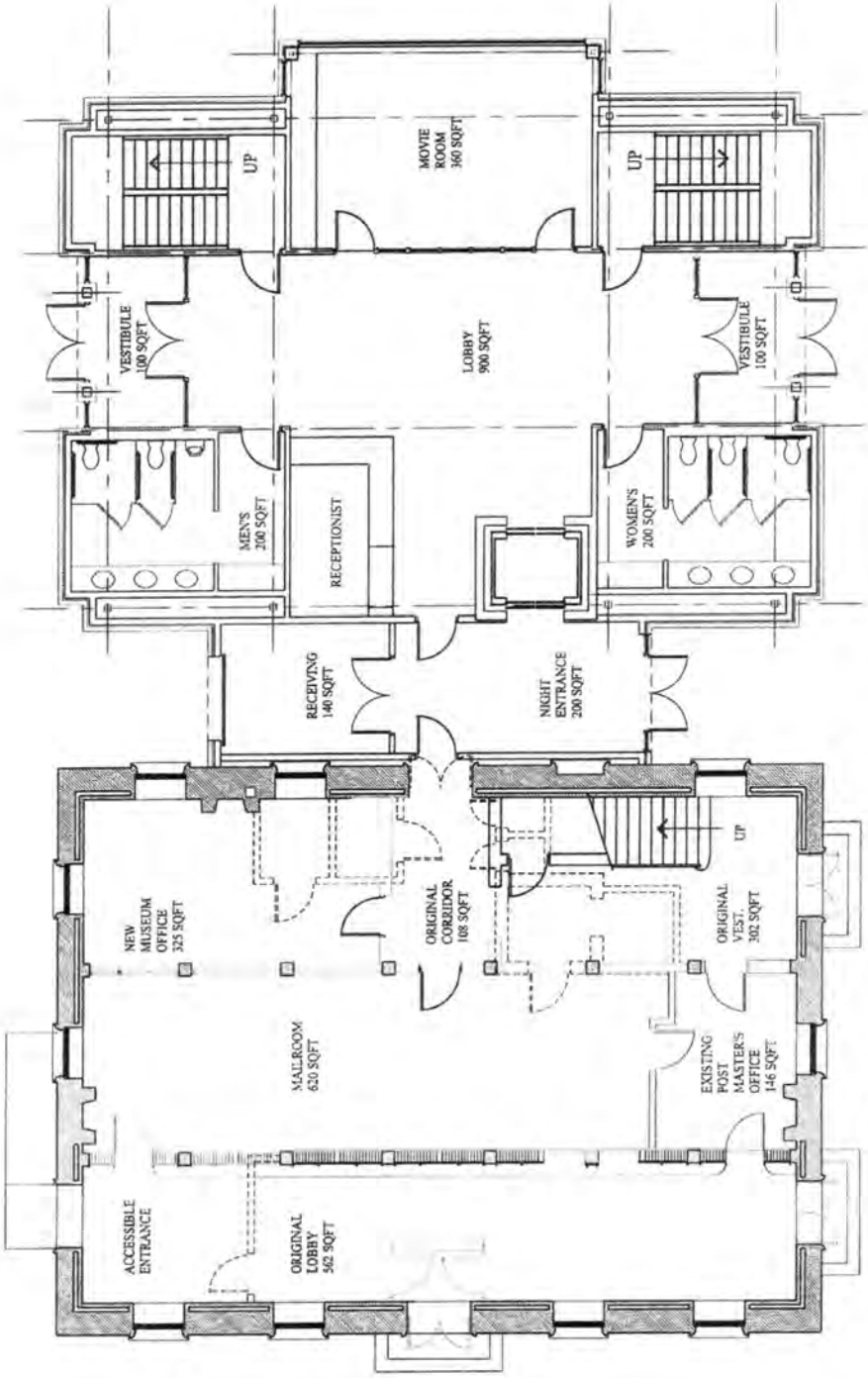
## Site Plan W/ Proposed Modification and Addition



## Foundation Plan W/ Proposed Modification and Addition



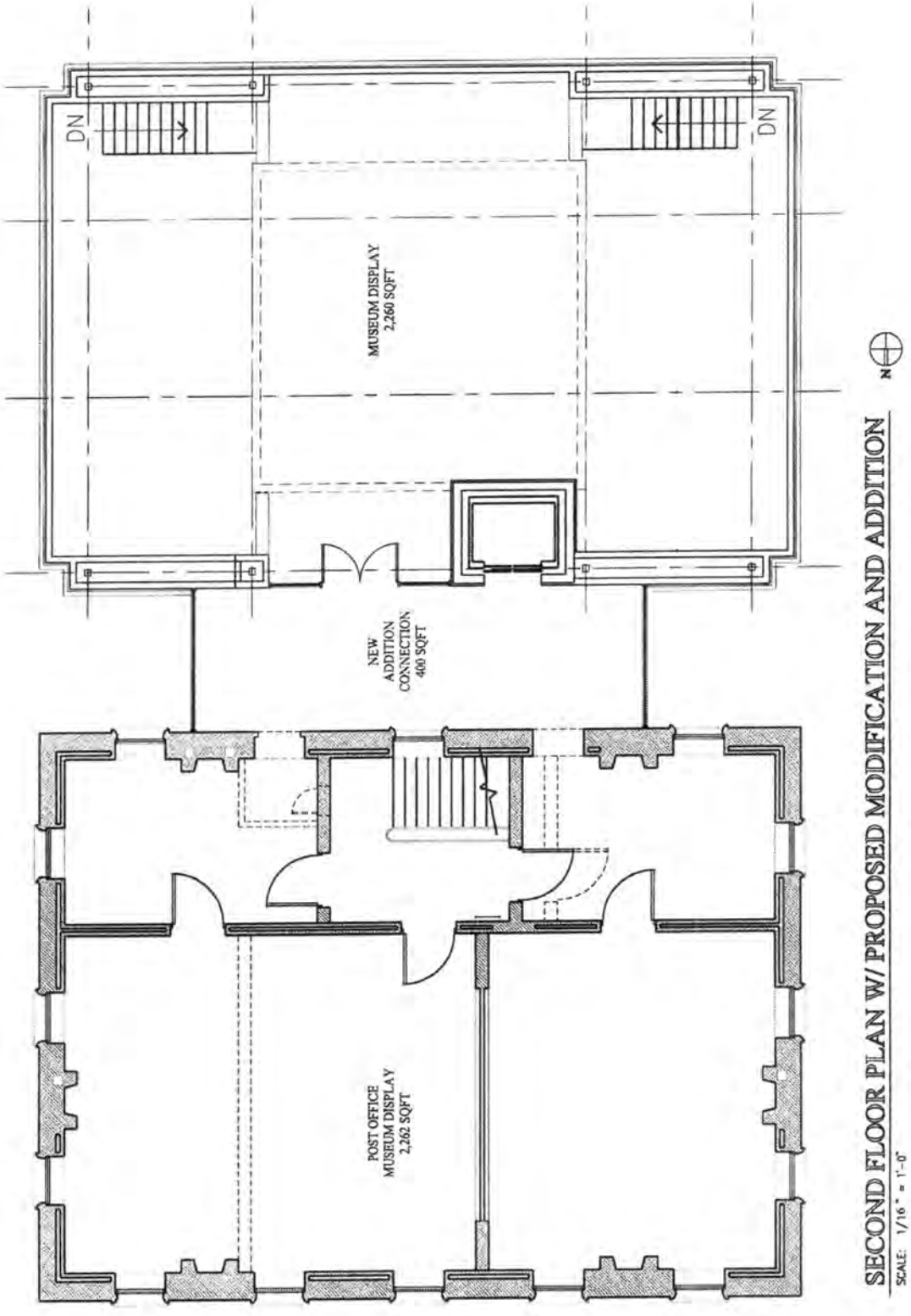
## First Floor Plan W/ Proposed Modification and Addition



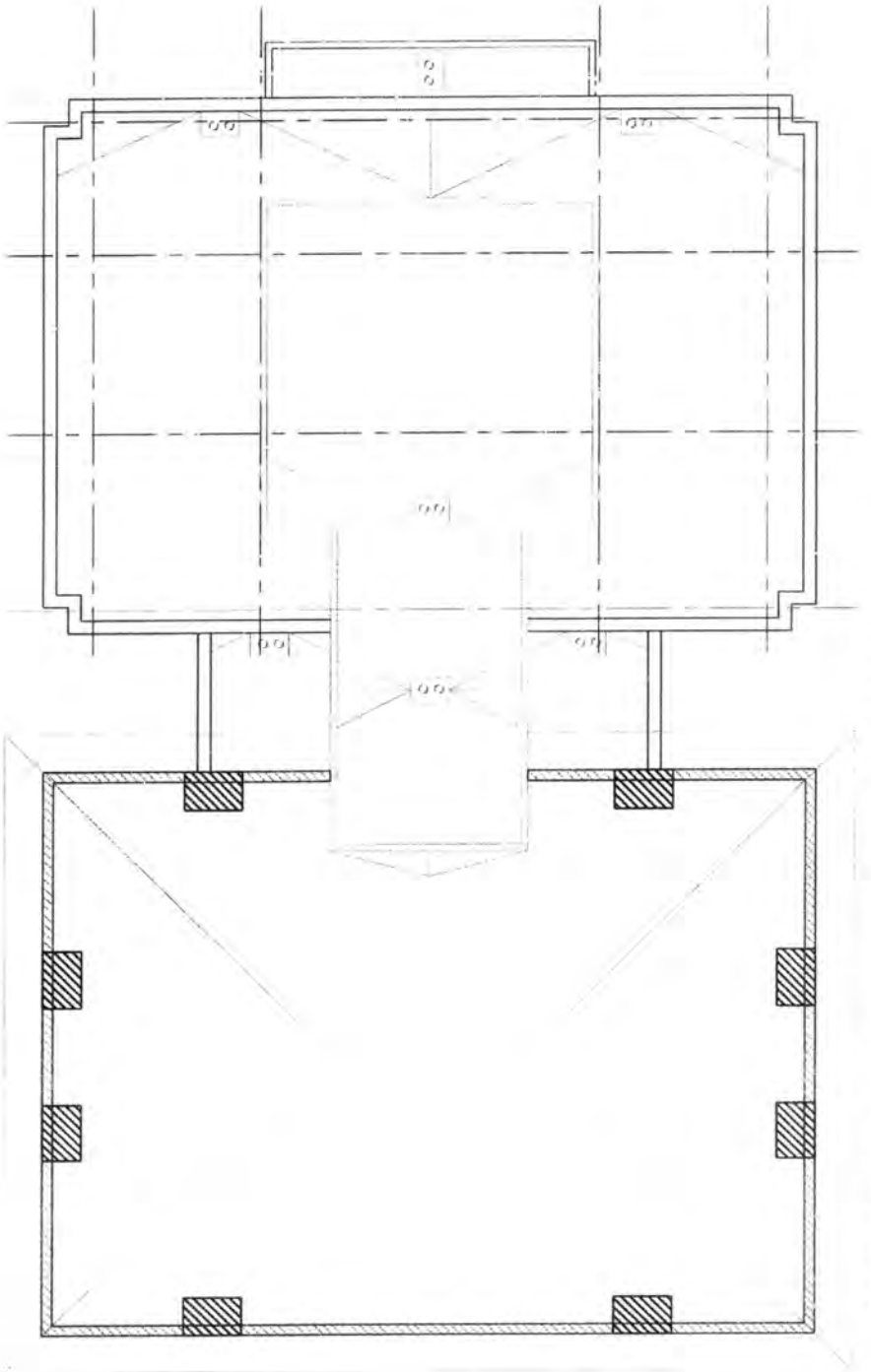

FIRST FLOOR PLAN W/ PROPOSED MODIFICATION AND ADDITION

SCALE 1/16" = 1'-0"

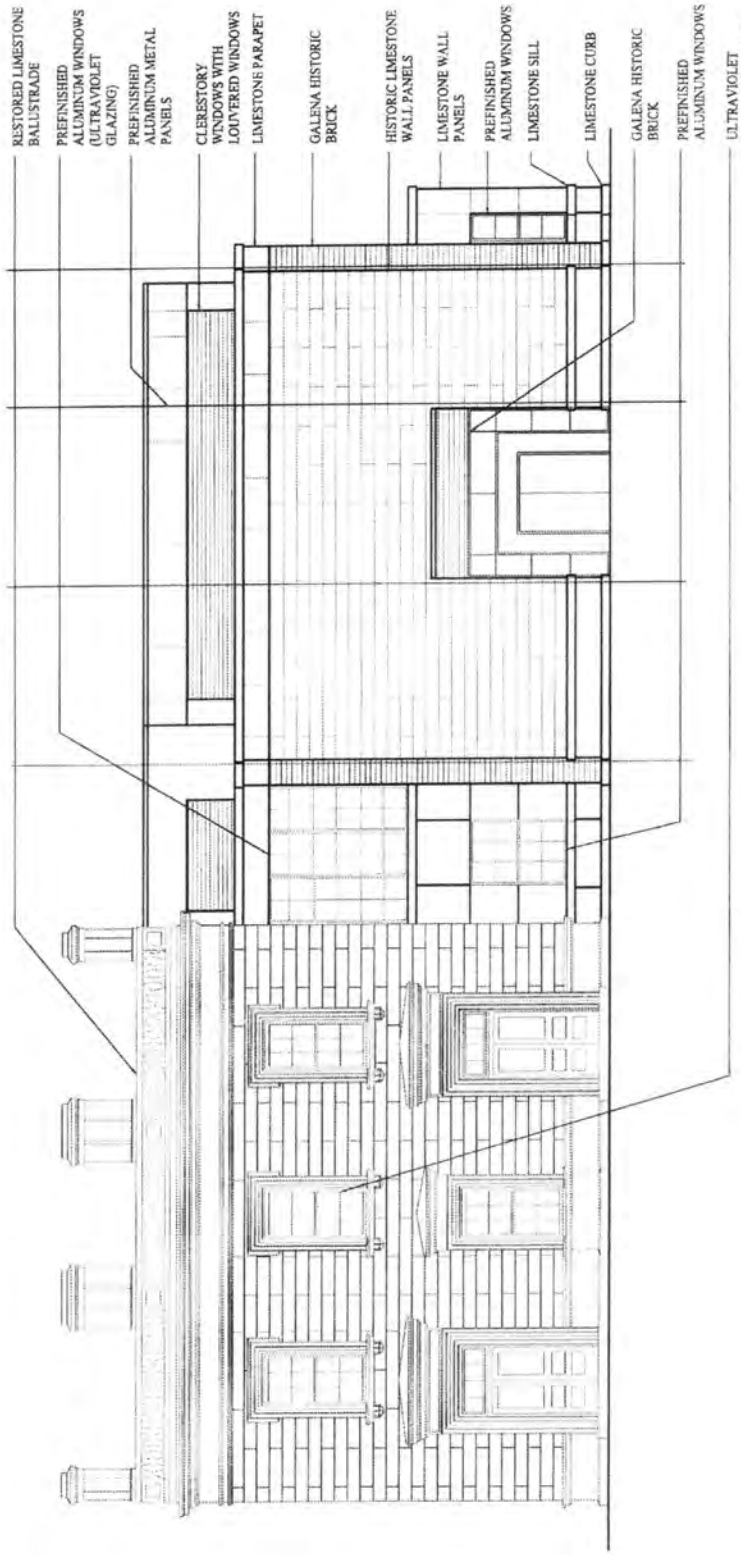
## Second Floor Plan W/ Proposed Modification and Addition



## Roof Plan W/ Proposed Modification and Addition



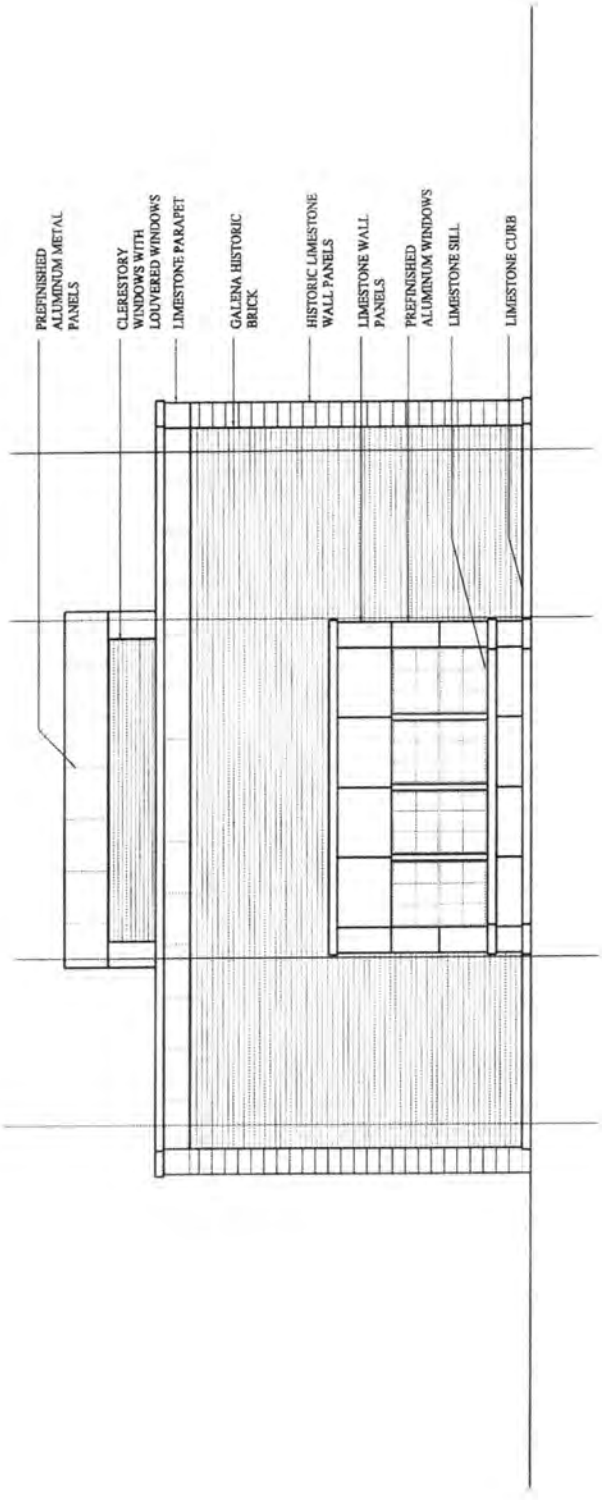
# West Elevation W/ Proposed Modification and Addition




WEST ELEVATION W/ PROPOSED MODIFICATION AND ADDITION

SCALE: 1/16" = 1'-0"

## South Elevation W/ Proposed Modification and Addition




SOUTH ELEVATION W/ PROPOSED MODIFICATION AND ADDITION

SCALE: 1/16" = 1'-0"

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